

88/82

c

88/82
c

Regional Oral History Office
The Bancroft Library

University of California
Berkeley, California

Ansel Adams

CONVERSATIONS WITH ANSEL ADAMS

With Introductions by
James L. Enyeart
and
Richard M. Leonard

An Interview Conducted by
Ruth Teiser and Catherine Harroun
in 1972, 1974, and 1975

Copy No. 1

All uses of this manuscript are covered by a legal agreement between the Regents of the University of California and Ansel Adams, dated September 15, 1978. The manuscript is thereby made available for research purposes. All literary rights in the manuscript, including the right to publish, are reserved to Ansel Adams during his lifetime or, if deceased, to the Ansel Adams Publishing Rights Trust until December 31, 1989. No part of this manuscript may be quoted for publication without the written permission of the Director of The Bancroft Library of the University of California at Berkeley.

Requests for permission to quote for publication should be addressed to the Regional Oral History Office, 486 Library, and should include identification of the specific passages to be quoted, anticipated use of the passages, and identification of the user.

The legal agreement with Ansel Adams requires that he or, if deceased, the Ansel Adams Publishing Rights Trust be notified of the request and allowed thirty days in which to respond.

It is recommended that this oral history be cited as follows:

Ansel Adams, "Conversations with Ansel Adams," an oral history conducted 1972, 1974, 1975 by Ruth Teiser and Catherine Harroun, Regional Oral History Office, The Bancroft Library, University of California, Berkeley, 1978.



Photograph by Pirkle Jones

Ansel Adams receiving honorary degree from the University of California, Charter Day, 1961.

Left to right: President Clark Kerr, Ansel Adams, Professor Joel Hildebrand

TABLE OF CONTENTS -- Ansel Adams

INTRODUCTION by James L. Enyeart	i
INTRODUCTION by Richard M. Leonard	vii
INTERVIEW HISTORY	viii
INTERVIEW I -- 12 May 1972	1
Education and the Creative Process	1
Family Background and Childhood	2
Studying the Piano	6
Beginning in Photography	7
Youthful Experiences	9
Visualization and Music	12
Anticipation in Music and Photography	13
Mariner Photographs of Mars	16
"Monolith, the Face of Half Dome"	17
Literary Titles for Photographs	18
Portraiture	20
Manzanar	23
Early Days and Scientific Concepts	26
The 1915 Fair	28
Religious Concepts and Cemeteries	32
Aesthetics and Ecology	36
INTERVIEW II -- 13 May 1972	37
Photographic Equipment	37
Photography and Technology	40
Innovations and Patents	43
Innovations and Aesthetic Demands	44
Making Photographs and Printing Negatives	44
Photographs as Commodities	47
Photography and Politics	49
Group f/64	49
INTERVIEW III -- 14 May 1972	52
Stieglitz	52
Influences	56
Taste, Perspective, and Distortion	58
The Photogram	62
Nuclear Bombs and Photographic Materials	63
Nature Photographs: Points of View	64

Quality Levels and Portraits	67
Albert Bender	69
Commissions	70
Albert Bender and His Friends	72
Cedric Wright	75
Musicians and Artists	77
Cults, Controls, and Creativity	81
Prints: Tangible and Intangible Aspects	83
INTERVIEW IV -- 19 May 1972	87
The Group f/64 Exhibit	87
Meters, Lenses, and Film Speeds	91
Brigman, Van Dyke, Edwards, and Cunningham	94
<u>Parmelian Prints</u>	97
Noskowiak, Weston, Swift, Holder, Kanaga, and Lavenson	99
Brett Weston and Edward Weston	102
Applied Photography	104
Giving Photography Museum Status	105
Camera Clubs, Groups, and Galleries	110
The Golden Gate International Exposition Exhibit	113
Timing in Photography	115
Edwin Land and the Polaroid Camera System	117
INTERVIEW V -- 20 May 1972	121
Mortensen	121
Vision and Photography	122
Flash Mishaps	125
Photographic Printing Papers	127
Writing the Basic Photography Books	129
The Zone System	131
Meters and Automation	133
Technique in Relation to Aesthetics	137
Science and the Creative Photographer	138
Sensitometry as a Creative Tool	142
Contemporary Images	146
The Nude	147
Contrivance, Arrangement, and Simulation	149
Meaning, Shape, and Form	151
Time and Reevaluation	153
The Photo League and Politics	154
Working With Dorothea Lange	158
Early Visits to New Mexico	159
INTERVIEW VI -- 26 May 1972	159
Indian Art and Architecture	165
Ella Young	168
Santa Fe People	172
<u>Taos Pueblo</u>	175
Paul Strand and a New Approach	181

Santa Fe People, Continued	183
<u>Taos Pueblo, Continued, and The Land of Little Rain</u>	186
More Southwest Friends and Experiences	190
INTERVIEW VII -- 27 May 1972	197
The Reproduction of Photographs	199
Viewing Photographs	206
Light Sources and Light Measurement	209
Technological Advances in Photographic Films	211
"The Negative is Like the Composer's Score"	215
Beauty or Therapy?	220
Astronomical Photography and Videotape	221
INTERVIEW VIII -- 29 May 1972	227
Early Years in Yosemite	227
Mountain Trips With Francis Holman	232
Perils and Close Calls	236
Sierra Club Trips	240
Yosemite, Continued	244
Photography Workshops and Aspiring Amateurs	246
Joseph N. LeConte in the Sierra	249
The Half Dome Cable	252
Logic and Faith	254
Panchromatic Plates	256
Dreams and Heavenly Bodies	261
Concepts of Conservation and Wilderness	264
Yosemite Concessions	265
INTERVIEW IX -- 2 June 1972	266
Sierra Club Photographers	266
<u>Sierra Nevada: The John Muir Trail</u>	267
<u>Skiing in the Mountains</u>	276
The Sierra and Other Ranges	279
Alaska	281
Aerial Photography	283
<u>Yosemite and the Sierra Nevada</u>	287
<u>Yosemite Photography Workshops</u>	291
INTERVIEW X -- 3 June 1972	296
Skill in Music and Photography	296
The Friends of Photography	301
Museums and Critics	305
Proper Disposition of Photographs	311
Financial Practicalities	313
Original Prints	314
One-Man Shows	318
The Creative Intention	320
Exhibit Prints and Archival Factors	321

INTERVIEW XI -- 4 June 1972	324
Printing Earlier Photographers' Negatives	324
Eastern Visit, 1933	328
The Stieglitz Exhibit and the Adams Gallery	335
35 Millimeter and 2 1/4 Cameras	337
Photographs for Magazines	342
Assignments	346
Working With Dorothea Lange, Continued	348
Wartime Work	351
Problems Encountered	353
"Making" and "Shooting" Photographs	359
Printing and Papers	361
INTERVIEW XII -- 30 June 1972	363
More on Photography Workshops	363
Teachers and Critics	369
The Development of the Zone System	372
The Art Center School	372
The California School of Fine Arts	374
Large Photographs	375
Photographing a Potash Mine	379
Photographing the Carlsbad Caverns	381
Preserving Negatives	383
The Late Thirties and the Fair	386
Photographic Industry Attitudes	387
INTERVIEW XIII -- 1 July 1972	389
<u>A Pageant of Photography</u>	389
Land, Kennedy, Stieglitz, Norman, and Steichen	391
<u>A Pageant of Photography, Continued</u>	394
Aspects of Edward Weston	398
Landscape Photography and Taste	400
The Museum of Modern Art	401
"The Family of Man"	403
Nancy Newhall	404
Various Exhibitions	405
Geraldine McAgy and Lisette Model	409
Frank Lloyd Wright	411
Civil War and Frontier Photographs	413
More on the Manzanar Photographs	415
Museums and Galleries	417
Yosemite Today	422
INTERVIEW XIV -- 2 July 1972	423
Richard McGraw	423
Publications	425
Guggenheim Fellowships	431
Morgan & Lester, Morgan & Morgan	436
Color in Photography	440

Portfolios and Publishing, 1948-1952	444
<u>Aperture</u> Edited by Minor White	449
Beaumont and Nancy Newhall	456
Traveling Exhibits	459
"This is the American Earth"	462
Ecology and Rationality	471
Book Publishing	473
INTERVIEW XVI -- 8 July 1972	478
Work in Progress	478
<u>The Pageant of History in Northern California</u>	479
Making Photographs, 1972	488
Reproduction Rights	490
More Books	493
Government-Sponsored Exhibits	496
Photography Critics	499
Honors and Hawaii Books	501
INTERVIEW XVII -- 9 July 1972	503
Photographing Wineries and Vineyards	503
Pirkle Jones and Ruth-Marion Baruch	508
"Images and Words" Workshops	511
The Design of Printed Material	513
Scientists and Optics	515
Working With the Polaroid Corporation	521
Revising the Basic Photography Books	527
Hawaii Books, Continued	529
Signed Prints and Limited Editions	532
INTERVIEW XVIII -- 14 July 1972	534
Dreams	534
1963 Exhibition and <u>The Eloquent Light</u>	534
Traveling Prints and "Theme Shows"	538
Honors	541
<u>Fiat Lux</u>	543
Illustrating Jeffers and Other Writers	558
What Does a Photograph Do?	561
Conflicts and Friendships	562
INTERVIEW XIX -- 15 July 1972	565
More on Reproduction Rights	565
Darkrooms	569
Darkroom Tour	572
Formulas and Procedures	578
INTERVIEW XX (Sierra Club Interview I) -- 16 July 1972	582
Early Aesthetic Impact of Yosemite	582
"Some Wild Experiences"	585
Animals and People in the National Parks	587

Sierra Club Indoctrination, 1923	594
Concepts and Techniques of Conservation	595
Forces For and Against Conservation	601
Balancing Preservation and Recreation	606
INTERVIEW XXI (Sierra Club Interview II) -- 11 August 1972	608
Sierra Club People	608
Hetch Hetchy	613
Atomic Power Plants	615
Private Interests and the Public Interest	617
The Sierra Club and the Government	622
The Park Service and the Forest Service	624
Trans-Sierra Highways, Continued	632
The <u>National Geographic</u> and the <u>Sierra Club Bulletin</u>	636
INTERVIEW XXII (Sierra Club Interview III) -- 12 August 1972	637
Sierra Club Outings	637
More Sierra Club People	643
Sierra Club Campaigns	646
Protection and Overprotection	653
Citizens' Campaigns	659
The Sierra Club and Its Chapters	661
INTERVIEW XXIII (Sierra Club Interview IV) -- 13 August 1972	664
Sierra Club Publications	667
Zoning	671
The Sierra Club Decision-Making Structure	672
Leadership Conflicts	675
Publication Problems	680
Conservation Conferences	683
Gifted People	684
Conflicts, Continued	686
Preserving Wilderness Through Legislation	690
INTERVIEW XXIV (Sierra Club Interview V) -- 8 September 1972	691
The Sierra Club Foundation	694
Dams and Reservoirs	696
Transferring Properties to Public Ownership	699
A Western Club or a National Club?	705
Protecting and Administering Public Lands	706
The Alaska Pipeline	708
"The Conscience of the Board"	709
A Publications Program	714
The Future of the Sierra Club	716
INTERVIEW XXV -- 19 May 1974	721
Recent Exhibits	721
Polaroid Prints	725
Lighting Pictures	725
Plans	726

INTERVIEW XXVI -- 23 February 1975	727
Art Festival at Arles	727
<u>Images 1923-1974</u>	729
White House Visit	735
Park Problems and Solutions	736
Death of Nancy Newhall	740
More on the Friends of Photography	741
Future and Recent Events	743
INDEX	748
BOOKS BY ANSEL ADAMS	768

INTRODUCTION, by James L. Enyeart

Ansel Adams has often said that he is "incapable of verbalization on the content" of his photographs. "If a photograph does not say it, words or explanation cannot help." However, as the following interview will reveal, Ansel Adams is a most capable spokesman on his work and a great many other topics. When he says "verbalization," he means his inability to interpret or put into words the meaning of his photographs and, in that, he is not alone. Eloquent words by critics or historians may compliment, describe, or serve in other ways an artist's creations but, in the end, must yield to the muteness of the pen when applied to the visual arts.

Two series of events early in Adams' life stand out as significant landmarks in the development of his aesthetic predilections. Chronologically, the first of the two was his chance meeting with Paul Strand in Taos, New Mexico, in 1930. Strand had at the time only negatives to show Adams and, as he held each one up to the light of a window, a dramatic transformation took place in Adams' understanding of the medium. He felt he understood for the first time the poetic strength and structural power potential to the photographic medium. Up to that point, Adams felt that he had been "mostly adrift with my own spirit, curiosity, and vision." This revelation was of sufficient intensity to inspire Adams to give up a growing career in music and to devote his life to photography. (He had for many years trained as a concert pianist.)

For Adams, a commitment to photography encompassed the whole of photography and all its possible communicable aspects: commercial, documentary, political, and most important, aesthetic. This experience also revealed to him for the first time the relevance, spirit, and intent of the work of his friend and

peer, Edward Weston. Prior to his meeting with Strand, Adams had become a friend of Weston's but had not liked his photographs; however, two years later, he, Weston, and several other photographers (Willard Van Dyke, Imogen Cunningham, Sonya Noskowiak, and Henry Swift) with similar aesthetic ideals founded Group f.64 a visual manifesto of what they believed the straight photograph to be. In that same year, Adams had his first important one-man exhibition at the M. H. deYoung Memorial Museum in San Francisco.

The second series of events which most affected Adams and his subsequent life as an artist took place between the years 1933 and 1936. In 1933, he made his first trip to New York and met Alfred Stieglitz with the purpose of showing Stieglitz his photographs. Stieglitz was supportive and encouraged Adams in the direction manifested in his photographs. In 1936, Stieglitz gave Adams a one-man exhibition at An American Place, making him the first young photographer to be shown at Stieglitz' gallery since Paul Strand in 1917. Following the opening of the exhibition, Adams wrote a letter to a friend which detailed the success of the show and the impact Stieglitz was having on his life. The following is an excerpt from that letter: "To describe what Stieglitz is and what he does is impossible. He has dedicated himself to an idea and he has worked like hell for forty years to put the idea over. And it seems to be going over now with all the inevitability of the tides. The Marin show at The Museum of Modern Art exceeds anything of its kind shown in America. The work O'Keeffe is doing now is remarkable. Stieglitz promised me a picture of New York that will send chills up and down your spine when you see it. And here is Mr. Adams suddenly handed the most important assignment of his short

life--to maintain photographic standards as one of the Stieglitz group. I was quite a little stuck-up over the obvious material success of the Chicago show but what has happened to me here has thoroughly deflated everything but a sense of humility and responsibility. Nobody has conceit when they are with Stieglitz. The essential honesty transcends everything. You are or you are not. The pattern-sequence seems to indicate that I am." Humility, a sense of responsibility, and a commitment to the art world are all important aspects of Ansel Adams' character, as is his immutable sense of humor reflected in his love for puns and limericks.

As an artist, Adams gained an understanding and appreciation of the "equivalent" concept from his association with Stieglitz. Combined with his stylistic preference for the straight approach and his love for nature's grandeur, the "equivalent" aesthetic became for Adams an idea and mission uniquely his own which remains unrivaled today. Although his famous "Zone System" serves the science and technology of the medium, its primary purpose was one of providing a means for attaining the highest quality representation of the philosophical implications inherent in the straight approach and one's own personal vision. Equally important is Adams' attempt to make his photographs "equivalents" of his experiences, emotions, sensations, and thoughts. It is Adams' forging of the straight and equivalent photographic concepts into a unique style and philosophy of his own that has brought him the many admirers and honors he enjoys today.

One of Adams' greatest supporters and technical collaborators, Edwin Land, has said better than any other just what this unique Adams aesthetic is: "Adams realized that even the most precisely representational photograph is so far

removed from external reality that he was free to use such photography as a point of departure for his own kind of abstraction. That Adams has chosen what appears to be the most representational of media and subjects most prone to be represented, that he has chosen these to be the basis of his most abstract perceptions, is the first essential step in his genius. The challenge of making a non-sentimental statement about a grand insight into the abstract is multiplied a thousand-fold when the components of the subject have names and reminiscences to characterize them--tree and twig, rock and boulder--components assembled furthermore not as accidents but in their natural habitats as ordinary 'beautiful' arrangements. The greater the photographic skill brought to bear, the more elegant the technology employed, the more serious the threat to the artist who would lead us step by step in his own direction. For, as compared with the forms in ordinary abstract art, the direct derivatives from reality are distractions of deadly power.

"Thus the challenge which Adams undertook to meet was to show that these meticulously beautiful photographs, these instruments of distraction, could be directed by him towards unified new insights. He demonstrates that there is no greater aesthetic power than the conversion of the familiar into the unbelievably new."

Aside from the inventors of the medium, there have been few photographers who have made greater or more lasting contributions to the field of photography than Ansel Adams. His books on the aesthetics and technology of photography (including those books of his own photographs) are basic to the literature of the medium. Since 1949, he has been a consultant to Polaroid Corporation, and he was a major force in the creation of the Photography Department at The Museum of Modern Art, the Photography Department of the San Francisco Art

Institute, the Friends of Photography in Carmel, and the Center for Creative Photography at the University of Arizona in Tucson. He has helped to establish major collections of his work and the work of others at major museums and recently, with his wife Virginia, established the Beaumont and Nancy Newhall Fellowship at The Museum of Modern Art. In a different vein, but still through his photography, Adams has been a major spokesman for the Sierra Club (Board Member 1934-71) and remains today an ardent conservationist; that is, an active advocate of the preservation and protection of the natural environment.

Ansel Adams is perhaps the most well-known 20th century photographer throughout the Western world. In fact, his name is probably more familiar to a greater variety of people (and thereby a greater number) than any other visual artist, regardless of medium. This fame is not based on the murmurings of an elite art world and economy, but is the result of fifty years of publishing and exhibiting his photographs in those forums which allowed him to reach the broadest spectrum of society possible.

If Stieglitz and his circle are considered the pioneers of photography in modern art, then Adams may be considered the master of those earlier horizons. His legacy to the art world will be the institutions he helped create, the technology he subdued, the photographers he inspired and, most importantly, what he terms his "affirmation of life"--his photographs.

September 14, 1978

James L. Enyeart
Director
Center for Creative Photography
University of Arizona, Tucson

INTRODUCTION by Richard M. Leonard

The life of Ansel Adams is happily condensed and exemplified in a photo by his close friend Cedric Wright. "Sermon on the Mount" shows Ansel with tripod and large view camera on the summit of Mount Whitney speaking with almost religious fervor to a large group of Sierra Club friends. He was telling of the gentle beauty of the "Range of Light," Muir's favorite subject. Ansel continued his love of the Sierra Nevada for more than sixty years, to a culmination in the [forthcoming] publication of his great scenic book Yosemite and the Range of Light.

Ansel always was, and is, a very generous, outgoing person. Hundreds of his finest prints have been given, without charge, to "the cause"--any publication that would help public appreciation of the beauty of nature. One time Ansel and my wife, Doris, were on photographic business in Yosemite. At Valley View, the great scenic vista of the valley, two little old ladies in tennis shoes approached Doris asking her to take their pictures with their camera. Doris suggested the kindly man with the handsome beard. They did, and Ansel calmly analyzed the controls of the box camera and took a truly beautiful picture of them. They never knew the fee they missed.

For almost sixty years Ansel has been a member of the Sierra Club. It has been one of his greatest joys, and in later years one of immense frustration. He was of the old school, with views similar to the founders of the club and to Colby, LeConte, and Farquhar. He loved the knowledgeable negotiations for more park protection, based on facts as to the beauty and importance of the areas involved. It hurt him to see the leadership of the club pass for a while into bitter antagonism to the land protection agencies, "kicking their shins," as he called it, instead of supportive negotiation based on reason.

He comments in his text that I called him "the conscience of the Sierra Club." That is true. Frank Kittredge, Regional Director of the National Park Service, told the board of directors of the club one time that "the administrator almost always has to make financial and political compromises. If the Sierra Club's position is not far to the 'white,' then the compromise may be a darker shade of gray."

So at page 67 of my own oral history I stated in a discussion of the "purists" of the environmental movement that:

"Ansel is so pure he tried for at least ten years to resign (from the club) before he finally accomplished the resignation after his (1971) heart attack. Every time he would want to resign, he knew me so well and seemed to respect my views that I was always able to talk him out

of it. He would say that nobody paid any attention to him and his views. I would say, 'Yes,' quoting Kittredge again, 'but you don't know how much more closer to the black we would have voted if it hadn't been for you arguing for the absolute pure white position.' In those days the Sierra Club did compromise much more than it does today. Ansel was an absolute purist and still is."

Upon Ansel's retirement in 1971 the board of directors, in appreciation of his thirty-seven years on the board and his exceptionally high quality contributions, unanimously elected him an honorary vice-president of the Sierra Club. Because of Ansel's objection to the new "shin-kicking" method of negotiations, Ansel refused the honor. In 1974 he was again unanimously elected honorary vice-president, and again refused the honor.

Finally, in 1978 Ansel had "mellowed" a bit, and the Sierra Club had matured beyond the strident attitude of the past few years and had clearly accomplished an immense amount of environmental good. So Ansel graciously accepted the honor, a fitting rapprochement in the fine work of Ansel and the Sierra Club over so many years.

Richard M. Leonard
Honorary President, Sierra Club

4 July 1978
Berkeley, California

INTERVIEW HISTORY

The interview with Ansel Adams was held in twenty-six sessions. The first twenty-four began 12 May 1972 and concluded 8 September of that year. Of them, the last five were devoted to Sierra Club affairs, although the club had been referred to and some aspects of it discussed in earlier sessions. The final two sessions in the series were held on 19 May 1974, and 23 February 1975, and were concerned principally with events recent to those dates.

All of the interviewing was done in Ansel Adams's home at Carmel Highlands, California. Most were held in the comfortable living room; the only exception was the darkroom tour described in the interview. All of the sessions were held in the late afternoons on Fridays, Saturdays, and Sundays. Most lasted about two and a half hours. Mr. Adams, who had usually spent the day working in his darkroom, viewed the interview sessions as periods of relaxation. He preferred not to consider the subject matter in advance but to discuss spontaneously whatever was brought up. The result is this informal, wide-ranging, informative series of conversations.

Mr. Adams's editing of the interview transcript, which was sent to him in sections, was done over a two-year period, in time fitted into a busy schedule. (He read one section while confined to bed with the flu, another on a trans-Atlantic plane.) He made brief additions, most in response to queries by the interviewers, and some corrections, but no extensive changes.

The Regional Oral History Office is grateful to Mrs. Helen M. Land, whose generous contribution to the Friends of The Bancroft Library made the project possible, and to the Sierra Club for a contribution toward the part of the interview that deals specifically with the Sierra Club. In addition, thanks are due to Helen M. LeConte, long-time friend of Ansel and Virginia Adams and of the interviewer, for valuable assistance in the project.

Ruth Teiser
Catherine Harroun
Interviewers-Editors

18 August 1978
Regional Oral History Office
486 The Bancroft Library
University of California at Berkeley

[Interview I -- 12 May 1972]
[Begin Tape 1, Side 1]

Education and the Creative Process

Adams: My father [Charles Hitchcock Adams] was a very broad-minded man, and I guess he must have known that I was a bit of a nut, but he had faith, and they sent me to various schools. I didn't do at all well, so then I got into music and decided that was pretty good, and my father said, "Well now, if you want to you can go to the university, or study music, and if you do music all I'll ask you is to take some languages and sciences because they are useful."

So I studied with several private people--a little Greek, and my father taught me a little French. Had a miserable time with German--didn't go anywhere with it. And so I was free to do pretty much what I wanted. All that he wanted was the satisfaction that I was getting somewhere.

It would have been extremely difficult today to have done that because of your school regulations and the conventions of education. This tends to worry me a little bit, because I know our own children just had to go to the grammar school and the high school, and a lot of things seemed to be a great waste of time. My son [Michael Adams] had a compelling interest in flying. It was later on that he decided to become a doctor. But I just can't help thinking of the difference.

Now, Russell Varian (he's dead now, but he was the head of the Varian Associates, he and his brother) and I understood that even in high school he couldn't read. He could read silently, and he could write pretty well, but if you asked him to read this, he couldn't read it out loud. So of course he was considered a prime nut, but he was a genius in mathematics and physics, and on the basis of that he got into Stanford.

That's impossible today, because he didn't have any of the "credentials."

Adams: Then his brother, Sigurd, was a very fine engineer. You don't realize that they were one of the dominant powers, forces, in the development of radar. And here's a guy who couldn't read out loud in high school! [Laughter]

So the creative process is something that is inevitable. You can't control it. You can't stop it. There's nothing you can do with it. You can wreck it, I suppose, but if a person was really creative, I don't think he would get into drugs and things. I think the impulse is there and it's strong.

I guess I'd say that with me the impulse must have been there, but certainly the family support had a great deal to do with it.

Family Background and Childhood

Adams: My Adams family came from New England, and my grandmother* spent the last decade of her life trying to relate us to the presidential family, but it doesn't work. [Laughter] They are very distantly related, but nothing that you'd say would be family.

Teiser: Were there creative people in your family?

Adams: Well, Henry Adams was closer. I don't know just what the relationship was, but that's almost to the point where any quality that they had would be so distributed in the genes that you couldn't count on it after so many generations of diffusion. My grandmother's family was from Thomaston, Maine. That was the Hills family, who, it seems, are related to the Hills coffee people. She found that out. She could trace the ancestry back to England, to Lord Rosse**, the astronomer. And that's all we can tell on that side.

On the other side, the Bray family--[to Mrs. Adams] there's not much known about the Bray family, is there, other than they came from Baltimore?

Mrs. Virginia

Best Adams: Well, they had Oliver Cromwell as a relative.

Adams: They had?

*Cassandra Hills Adams, wife of William James Adams.

**William Parsons, Third Earl of Rosse.

V. Adams: Yes. Auntie "Crumell" they called her; she belonged to the Cromwell family.* I don't know whether that's an honor or not.

Adams: I didn't realize that. So that would be several generations remote.

Teiser: That was your mother's family?

Adams: That was my mother's family.**

Teiser: How did her parents get to Nevada?

Adams: Well, they both in '56 came across the plains and went to Sacramento--a business--then moved to Carson City, and they lived in Nevada. My mother was born in Iowa, though, on the way over. My father's father came west one or two times--started a business and then went back again and married and came back by ship. I guess he always came by ship. But the Brays came across in a covered wagon.

So then my grandfather [William James Adams] got in the lumber business and several things. If all had gone well I might have been a real playboy, but it didn't. He was at one time supposed to be the wealthiest lumber man on the coast, and there was a series of disasters, a couple of crashes, and he lost twenty-seven ships by fire and shipwreck--lumber ships--in twelve or fifteen years. Just disaster after disaster. Several mills burned, and in those days the insurance cost almost as much as what was insured, so if anything happened, that was just a dead loss. But of course, the accounting in those days--you just had money in the bank, and if a ship was destroyed, you just took the money out and built another one. I mean there was no such thing as cost accounting or--if they took in a great deal of money, they just took in a great deal of money, that was all. There were no taxes. It was so simple compared to today. And offices for these big plants had none of the present style--I remember as a kid there'd be a great big shed, you know, and all the steel work of a lumber mill, and the office would be about as big as this alcove, a kind of mezzanine supported with rods from the ceiling, and a staircase. And then there were a couple of ladies, maybe somebody with an old-fashioned typewriter, and a couple would be writing in books, and that was the office.

Teiser: For the lumber mill?

Adams: The whole business went through just this little office. Oh, maybe a couple of office boys, and paymasters, you see.

*She was a great aunt of Ansel Adams.

**Ansel Adams's mother was born Olive Bray.

Adams: I know years ago my father was secretary of the Merchants Exchange [in San Francisco], and they controlled the Merchants Exchange Building. Every Friday it was payday for the men, and my father would take the voucher to the treasurer to be approved, and then go to the bank and get the money--greenback money which was put in little envelopes. And each man had his name on it and the amount due him. There was no withholding, nothing, just the amount. Then they'd line up, the janitor, the engineers, and I used to help my father sometimes. You had to say the names: "Mendota," and Joe Mendota gets his envelope. Compared to today, you know, it's amazing that business was that way. But that's getting a little bit away from your mission.

I remember the whole family. My uncle [William L. Adams] was a very fine doctor, and he died when I was about ten or twelve, I think, of diabetes. That was before insulin. And he was a very prominent doctor, what they called a diagnostician, and a diagnostician in those days was the equivalent of an internist, an internal medicine man, today. But I think in the last fifteen, maybe twenty years of his practice, he saw patients only referred to him by other doctors, whereas now the internist refers to specialists. All the other general men around would say, "Well, better go see Dr. Adams on that." He was the "diagnostic expert."

Teiser: Were you friendly with him?

Adams: He was a very nice man. He was a good student of French, translated French poetry. His first wife was a nurse whom he met studying medicine in Paris. She converted him to Catholicism, and he succeeded in converting half the family. So half of us are heathens, and the other half are Catholics. [Laughter] I think we're supposed to be Episcopalians for the record.

Teiser: Did people read to you before you, yourself, read?

Adams: Yes, my father would--very patient. I read very early, though. I could read at a very early age.

Teiser: Teach yourself?

Adams: Oh, I guess so; just read, you know. I had a phenomenal memory. At the age of twelve I could look at a page and recite it. In fact, even when I was first studying music I could take a thing to bed and read it at night and play it the next morning. I could see the notes. That facility left me at about sixteen, seventeen. I lost that. Now I have one of the world's worst memories. But that's all right. It's perfectly natural that you lose that kind of memory because so many other things come into the mind. I think that the reason I have a bad memory now is that there isn't any room. I've got so many things

Adams: going on and thinking about, that I meet somebody and I hear the name and I forget it. I forget how to spell it. And then it's very embarrassing, because I remember the face. I can't remember the years the pictures* were taken in, but I can remember the situation of taking them. I can go right back, and in most cases I can see the camera, the lens. I can tell you the exposures. I can remember that phase very clearly, and a great many things way back to the middle of the 1920s. I can pretty much point to the camera, the lens. I can remember I did this with the second Zeiss Protar I had. I remember that this was a very wide-angle lens with the smallest stop, which was actually f/56, and you know, I can remember these things. But as for the dates, I can't remember those at all, and that drives my friend Beaumont Newhall, the historian, out of his mind because some of my pictures appear with three or four different dates on the back, so I use the word "circa" now. So it will be "circa early twentieth century." [Laughter]

Another very important thing was the location. When I was one year old we moved out to the new house in San Francisco because my father wanted to be in the country. It was right in the middle of the sand dunes near the ocean, and an old house a block or so away from us was the nearest house. I can remember--just a little kid--I'd sit at the window and watch my father--in the carriage (they had a man at the end of the line at First Avenue)--he'd come out on the street-car to First Avenue, and there were two carriages that ran up and down Lake Street. And you'd have to wait maybe fifteen, twenty minutes, get in the carriages, and we'd see Papa and the horse clumping out Lake Street and he would get off at Twenty-fourth Avenue and walk down on a board walk through the sand to the house. I've got all those memories--the wild country and the beautiful flowers and Lobos Creek, and the fog horns, and Bakers Beach right down below. You know, you had a feeling of very close contact with nature.

And a very interesting thing, when they started developing the area, there was a man named S. [Stephen] A. Born, a contractor, who built the houses now in Westclay Park. He did some of Seacliff, but Westclay Park was his area. And he was a very fine builder, I mean he always put more wood in than was needed. Some of those houses are just as sturdy as a rock. I know a friend of mine has a house that he built in 1918, 1916 I guess, and that house is absolutely solid. You know its timbers--wonderful construction! But he used to let me go over to the work room and shed and draw plans, and the architect and draftsmen were very kind and would show me how to draw, you know, building plans--what an elevation was, and space problems. I still remember all that very clearly. I could have been an architect.

*Ansel Adams's photographs.

Teiser: How old were you when you were interested in this?

Adams: Ten, eight or ten. So I learned a great deal of that. And that helped precision of thinking. Now, this is all very important, because that gave me a certain precision. Well, you draw a straight line and measure it, you see. Even showed me how they form a drawing, leave spaces for the rug, how to figure all the different dimensions, and how to draw an arch. You know, I just learned--the guy loved to teach me these things, and he'd give me a T-square and a little desk, and I'd sit over there in the corner and work.

He said once that I had a couple of good ideas and he was going to use them. I don't know what they were.

Studying the Piano

Adams: Well, the next thing as far as precision goes, the training in music, which was with an elderly maiden lady, Miss Marie Butler, who was a long-time associate with the New England Conservatory of Music. She came from a Unitarian family from Boston, very precise and extremely accurate, and had the patience of Job because I was really pretty scatterbrained. She told my father that I had talent, it was obvious, but I never was going to get anywhere unless I had discipline, and the discipline might take anywhere from six months to five years. Was he willing to stick it out? I mean she was perfectly frank. She said, "He's extremely scatterbrained. He looks out the window. He thinks of something else." My father said, "Keep at him," so I had her for years.

It finally got to the point when I would do, say, a Bach Invention, it'd have to be note perfect. I mean it, there was no compromise, and if I didn't, "Bring it back next Friday." I mean no soft decision. I'd get so damn sick of that thing that I'd just go out of my mind. But I finally, by feeling obligated, I just did it. So, I would do it. Fine. I would go to something else, and on, and on. Beethoven, Chopin, Schumann. And this perfection, and the quality of tone which I learned from her and, of course, my finger technique--my hands weren't heavy, so it was impact, you know: lift, strike and relax. The idea is you strike a key but you relax immediately and slightly lift the key; that's part of the first exercise you do, to get that dynamic thing, and then the release. So that gave you a terrific tempo, you see, and very crisp sound--and that built up, well, a dependency on accuracy. She wouldn't tolerate any sloppiness. I remember one day she said, "Well, now, I'm very happy about you, and you've gone as far as you can go with me, and I think you now should study with Professor [Frederick] Zech. (Old man then, seventy-eight.) And he had studied with and assisted Von Bülow.

Adams: And he was a real Germanic--you know, incredible, I'll never forget--he'd demonstrate technical passages, the only thing he'd ever demonstrate with me. And he said, "Well, you're a little weak on your double fourths and thirds and sixths." He said, "You must play sixths like this." And here was this chromatic cascade of double sixths, you see. [Laughter] I'll never forget hearing this, but it was a totally impossible thing. But I did it, I got it! But never any one of the teachers played for me just the plain music, on an imitative basis. It was all done by encouraging that you ask yourself, "Did this sound right?" or, "Do you think you really shaped that phrase?" You know, this dialectic thing.

After Zech I went for six weeks to a woman called Elizabeth Simpson in Berkeley, who was one of those most satisfactory teachers as far as the facility of her class was concerned, and she taught with two pianos, which is I think the most deadly thing you can do, because all of her class sounded just like her; no individuality. Now, my father was pretty sensitive, because I came back after a couple of lessons, and I was playing Schubert, and he came over and he said, "What's happened, it doesn't sound like you?" And I said, "What do you mean it doesn't sound like me?" He said, "Well, the style is not you. You know, I've been listening to you now for quite a few years." And it occurred to me, well, my gosh, she was "showing" me. She was playing a phrase--leading me on--and I went a few more weeks and went to a recital, and it all became perfectly clear that it was parroting. And she just simply taught that way. She had immense success. They all played exceedingly well, but they all sounded just like she did. (Do cats bother you? Because this one is very friendly.)

Well, then I went to Ben [Benjamin S.] Moore who was an organist-pianist, and he was a very great influence on my life because he was also a philosopher and gave the music another dimension. He was also a purist. And that was the end of my musical training. I worked with him for years--five or six years, I guess.

Beginning in Photography

Adams: Then gradually I got off into photography, and pretty soon I'm in photography professionally!

But the important thing is that these precisions were unobtainable in the photographic world. There was no school of photography, nothing but going out and apprenticing yourself to someone who did photofinishing, which I did for a couple of summers. You know, you learned how to "soup a print," as they called it and,

Adams: oh, terrible stuff--but there was no school relationship, no academic contact or anything, and there were just two or three very good photographers who were terribly jealous. [William E.] Dassonville was very kind to me. He made photographic papers, and he helped me a great deal. The other photographers were nice enough, but, gee, they just hated to give away secrets, you know--as if there were secrets in simple technology!

I remember Moulin*, the old man. He had a big factory--I'm sure you know of it--in San Francisco. A big place. He called me up once and he said, "Mr. Adams, I know we photographers don't like to give away our secrets because it's all we've got. I don't know how you feel about it, but I've got to ask a question. Something I just don't know, and it bothers me." I said, "Well, Mr. Moulin, I have no secrets, but I'm not an encyclopedia." He said, "What does potassium bromide do in the developer?"

Now, that is like asking, "What does salt do in soup?" or "What does yeast do in bread?" It is one of the fundamentals, a restrainer, and it's been around for nearly a century, and it simply keeps the developer grains from developing themselves where they have not been exposed to light, so it prevents fog, and most developers are active enough to always develop a certain amount of grains that have not been affected by light, and then you get this fog. You see, if it has a little restrainer, which is bromide, it puts bromide back into the halide crystals, and this "clears the whites." But here is this man who was the biggest photographer in the city, and had the biggest business and the biggest staff, and nobody on his staff or he knew what potassium bromide did.

But of course if I really had to tell you what potassium bromide did and describe the chemical structure, the reaction, that would be far beyond me from the point of view of a chemist. This is a very complicated physical chemistry step. But for all intents and purposes, you know what it does when you add it to the developer. You add seasoning to food and you don't chemically analyze seasoning; you ask for saffron or, you know, pepper or something, but you don't give the chemical analysis of it. But at that time, you see, we weren't getting information from anybody. Everybody either didn't know or wouldn't tell.

Teiser: This would have been when?

Adams: The twenties.

*Gabriel Moulin, founder of a major San Francisco photography studio.

Teiser: I see. That late.

Adams: The end of the twenties. And the Moulin episode came in the thirties. At that time there were only a few--there was Ann Brigman, there was Imogen Cunningham, there was Dorothea Lange, Consuelo Kanaga, William Dassonville. As far as I know, they were the only photographers in the area who had any creativity. (Well, I was on that side of the fence.) And Dassonville did portraits, pretty good ones, although to the "trade;" it was soft-focus, and on soft papers. Imogen was doing portraits. I guess she was the best; she had the greatest variety of approach. Dorothea Lange was doing portraits and some Indian work, not very good. Didn't have any technique. Consuelo Kanaga was a delightful woman and imaginative artist, but again, no technique. They were trying to say something in a language you can't write.

So then when I first started in serious photography--that's 1930--it was people like Willard Van Dyke and Edward Weston that came on the scene. Of course, they found that here we had all these damn camera club people with hideous taste, imitative stuff, soupy sentimental business. A lot of them had a very fine mechanical technique, which was always very irritating to me. [Laughter] They knew a lot about it, you know, but what they did was terrible aesthetically. And that led into Group f/64, and this is probably another chapter entirely. I'm going way ahead.

Youthful Experiences

Adams: I'd say that my first experience in nature was a regional experience; of Bakers Beach and that whole western part of the City, which profoundly influenced me; the storms and the fogs and all this open space. Why I didn't get killed a hundred times on those Golden Gate cliffs I don't know. I used to go out to Land's End and climb all over without knowing how to climb, and all alone. I got into some tight situations.

Teiser: Did you play alone a good deal of the time?

Adams: Oh, yes, yes.

Teiser: You did?

Adams: Yes, I didn't have--well, there were a few boys in the neighborhood. Nothing really happened that way. It was interesting; I didn't have any real friends. I just didn't need them. I don't know.

Adams: But the other experience was then going to Puget Sound to my father's plant. It was after 1912 when he started the plant to recoup the family fortune, and we had this property on Puget Sound. He acquired the rights to the Classen process. Now, this is chemically interesting, but today things have superseded it. It was a way of making industrially pure alcohol, ethyl alcohol, not methyl or wood alcohol but just industrially pure ethyl alcohol, 200 proof, from cellulose. They decided that that area was magnificent because of all the sawdust and the slash, and all the available wood material which the lumber mills would just love to get rid of, and they'd send the barges around all over the Sound and collect tons of this stuff, and then come back and go through this Classen chemical process which involved treatment by sulphurous acid, and they made--we still have some--200 proof alcohol. It's as pure as anything you'll ever get, and more potent, easily drinkable. The residue of that, the cellulose, was then mixed with molasses and a few other things (they didn't know about vitamins then, but "enrichments") and it was sold as cattle food. It was called Bastol, and that had a great future because it was relatively light in relation to energy, and it could be mixed with hay or grain.

And what happened in this case was that industrial alcohol was at that time a by-product of the sugar industry (the sugar cane residue). And the Hawaiian sugar trust--you can literally say that the group got together and decided that this company can't go on. And they bought out every share of stock they could get, and my father's brother-in-law* was bribed and he sold out and betrayed him. It was a terrible blow. My father's lawyer betrayed him. They sold their stock and got out of it, for a price. It was a terrible blow to Papa, and they got 54 percent control of the stock, threw everybody out, put in a dummy board, and wrecked the plant.

Now, it was so important to them, they didn't even try to salvage some of this beautiful equipment--the machinery was wrecked. Of course with the S.E.C. today and the rules we have, that couldn't happen. There's no possible way that you could do a thing like that. You could buy the stock, but you couldn't put it out of business, you see--protection of other stockholders is important. Of course, a lot of people lost quite a little money in it, and my father was just ruined, and of course in a terrible state over this financial catastrophe, because he was always a person of the highest integrity. But when someone of his own family, whom I was named after...! That's why I don't use my middle name. Ansel Easton was unspeakable as far as I'm concerned, because I know what he did. My father in fact felt so much for him he named me after him, Ansel Easton, and unfortunately, I have to use that name legally, and I just hate it. But you notice I don't use it in any correspondence or in relation to my work. My

*Ansel Easton; see paragraph following.

Adams: professional name is Ansel Adams. But that was a family disruption and, of course, part of the family went with them, and the other part stayed with us.

Teiser: How old were you when that happened, about?

Adams: Oh, I guess I was about twelve or thirteen when it happened.

Teiser: Were you upset by that?

Adams: Well, I knew something had happened, because we went from a cook and a maid and a governess to doing it all yourself! [Laughter] You know what I mean--quite down and out. Papa spent a lot of time after that trying to recoup his plant. And they had an antimony process, and inferior people in management. The Bank of California, which my grandfather helped found, had carried the loans and mortgages on the properties for years and years, and finally the law caught up with them and they said, "We have to call the loan." But it was with great regrets. I mean my father's word was like my grandfather's. He'd go in and say, "I need a thousand dollars." "Well, here it is." It was just this kind of an honorable thing.

I haven't had to lately, but in the last twenty years--fifteen-- I had to go to the Wells Fargo or the Bank of California and borrow five thousand or so--got a job coming up--and they'd say, "Oh, yes, sure, Mr. Adams, we don't need any collateral with you." And, you know, you think, "Well, that ain't bad," [laughter] to have that reputation. Of course, legally, they have to show something protective.

Yes, I think it did have an effect on all of us, and I think it probably was something that stirred me to think realistically when I first went to the Sierra with my family in 1916, when I was fourteen years old. I think my mother reacted very badly to this catastrophe, and I think that tension probably encouraged me to go more into the mountains.

So, as I said I went early to Puget Sound, and then we went down to the Santa Cruz mountains, and then my father became secretary to the Astronomical Society [of the Pacific], and we used to go down to Mount Hamilton often. I never went East until 1933. Oh, yes, we did make a trip to Los Angeles when I was about nine or ten, and we stayed at the Alexandria Hotel, and I remember going around and seeing oranges and snow peaks and ostriches, and I can remember this brilliant, clear air! Still can recall it! Something like Santa Fe, New Mexico, has today. Certain moods in areas. I still remember that well in Los Angeles; we were there about six weeks.

Harroun: That was about 1910?

- Adams: That was 1910 or '12, yes. We went on the streetcars--the Pacific Electric Railway. But absolutely clear, you know, I recall that whole feeling of clarity. It was like this place, really, as it is now. [Carmel Highlands]
- Teiser: Were you conscious as a youngster that things impressed you visually?
- Adams: Yes, very much so. (Do you want anything now to drink, soft, hard, moderate?)
- Teiser: No, not a thing.
- Adams: You've met Jim Taylor?
- Teiser: No, we haven't. How do you do.
- Adams: I would have introduced you, but I was swallowing.

Visualization and Music

- Teiser: You said you were aware that you had a particular visual sense?
- Adams: Yes, I think I always had. There comes a romantic period when you can visualize literary realities. Say you hear music, and you--well, you're reminded of certain things. You see tangible images, and that's the basis of all these terrible titles some music has, like *Moonlight* Sonata. Whoever thought of moonlight rippling on the water? I never got that corny. The *Moonlight* Sonata was always a bad example, but you did get such things as the "Legendes" of Liszt, "St. Francis of Assisi Preaching to the Birds," and "St. Francis of Paulus Walking on the Waves." This is pictorial music. Well, at one age of life I'd get into that kind of direct pictorialism. I guess you'd call it "literary." But then it wasn't very much later--about five years--before my visual impression of music was quite abstract. I guess I got that mostly from Ben Moore and the music of Scriabin. But I'd remember everything I'd seen very clearly, and that's why the camera was so rewarding. I would capture what I saw, and the dissatisfaction that the image wasn't what I'd really "seen" was one of the things that kept me going. The average person just goes "click" and there's Grandma, and that's the satisfaction with the image. But in my case, the required image or the ideal image which we see and hear was not casually seen in the photograph; therefore I worked hard to get it. And when I got it, that was the beginning of my real photography, and the actual visualization, where you look into the world, you see a combination of shapes, and you see them in terms of the final picture. You don't see them

Adams: "outside" any more. And then you've got to get your eye, your camera, and everything around you into that position which will support that visualization. It's all intuitive. It has to come very quickly. That means you have to practice. If I don't go out with the camera for quite a while, I find myself very, very clumsy. I've just lost physical contact with the camera.

I have a little difficulty seeing and framing my images. Like, what would I do with you [Harroun] sitting there with your pencil and pad? I could go "click" and get a perfectly good record of you, which you would date on the back, and it would be very valuable. I think I have enough mechanics to get a good exposure, but that wouldn't be a picture. The picture would be the combination of all the relationships, the black line on your dress, and the black lines on the blanket [on the couch], and the element of light, and the distractions of the environment to get rid of. If you can't get rid of it, use it. But it's all quite plain in the end! Thousands of things are going on at one time, and you can't be aware of all those things, and you can't add conventions to it, because if you did that you'd ruin it.

It's just the way you practice the piano for years to get a facility in your fingers, tone control, shaping, dynamics, and when you play you can't think of all the elements; you just do it. One example, a friend said, "Well, you take the C Major Sonata of Weber and you take the last movement, the Perpetual Motion and the Rondo. You're playing four parts, sixteen hundred notes a minute." You have to have your harmonics, your dynamics (which is phrase shape), your rhythm or your accent, and then above all that, the peculiar thing in music--the style--the intangibles. And you practice. You're a musician; you've spent ten years or twenty, and you play this thing. And if you tried to even put it in a computer (it is going through a mental computer)--but there's no ordinary computer made that can handle what you're doing.

Anticipation in Music and Photography

Adams: I was talking about this just a little while ago. The mind is so far ahead of the computer except in some things, but in music, you see, we're anticipating. We have a whole new pattern of thinking, unconscious thought. You are anticipating things with appreciation of a tenth of a second's psycho-physical lag. And you're hearing harmonics, and the harmonics are developing in such a way that at a certain point you instinctively know you're ready for the next note. If you waited a tenth of a second until those harmonics had resolved, you'd be late. So, that's part of the structure that

Adams: people don't think about. I mean, when you hear music, that's what you hear. You hear this tremendously complex thing which can be broken down into a few categories, but it's really beyond literary definition. You can make a record of it. Of course, you don't get everything, even the finest records are not complete, but they are very close to it. You can break those records down on oscilloscopes. I've seen violin records broken down, recorded and then re-recorded slow, cutting out, cutting down to one-hundredth the time, and then making oscillographs and measuring the harmonics. I was absolutely fascinated with the complexity. You finally get a pattern where this other note--this thing which on the piano would be touch or on the violin which, I guess, would be intonation--why one is beautiful and the other isn't, and yet they are the same notes, and everything superficially the same.

And the same thing with the camera. I mean ten people can go to exactly the same scene and get ten totally different images, although they might have the cameras in the same position. Superficially the tree and the rock would be the same, but there's something else, you see. There's the way they felt it, visualized it, composed it, exposed it, developed it, and printed it. I guess I'm wandering a little bit.

Teiser: No, no, this is just fine. Is there a parallel in the sequential character of music as you were just discussing it and the sequence of events in a photograph--or is that stretching it?

Adams: No, no. My work is fundamentally static. In other words, I see the scene, and the scene is changing at a very slow rate. I'm not talking about a spectacular wave coming in or clouds moving, but I mean the natural scene is there, and I can think about it and compose and move around and get this rock or tree right. You know, I have command of it. Now, you take somebody like [Henri] Cartier-Bresson (and I've done some of his kind of work, I know directly what it means). His things are in motion. And the average candid so-called photographer just gets people on the fly. But, there again is this anticipation, and this might interest you. I was teaching at the Art Center School. We were working with students (this was before the second [world] war), Signal Corps people, photographers.

Gee, it was pretty hard. We didn't have much time with them, and they were in the army, but they were studying to use the Speed Graphic. Well, a very intelligent general, one of the few intelligent generals I've known, said, "I know you people are interested in the art phase, and that's why we want you to do this, because we can find all kinds of mechanical people who can give us the answers, but they're not the kind of answers that we want. We'd like to get these boys to see and to anticipate. Say you're out in combat, something is happening. You can't wait until something happens and then take a picture of it. It's happened so fast that you'll be late.

Adams: So part of the training that went on for weeks--I'd be upstairs looking around in the street for something, and suddenly see a streetcar, a block away, and I'd yell downstairs, "Let's go!" They'd all arrive with their camera cases and I'd say, "Catch the front of the streetcar in juxtaposition with that big power pole--I must see a precise juxtaposition." Well, they opened the case, they got out the camera, they judged the distance (we had a lot of focus controls)--"That's a hundred feet." They'd taken the light value measurements and they knew the approximate exposure, and then they were ready.

Now the point was, if you waited until you saw that car line up with the pole, then it'd be way over and beyond, because you have at least a tenth of a second lag. About a third of the students could hit it right on the nose, could anticipate the juxtaposition. Some of them would get nervous, you see, and more than anticipate, so they'd shoot too early. Then, well, after several weeks we'd have about 90 percent of them doing an exact job. Of course we wouldn't go back to the same subject, but they'd be more relaxed and see the problem more clearly as time went on.

[End Tape 1, Side 1]

[Begin Tape 1, Side 2]

Adams: Well, to take this element of anticipation, which is essential, I think I explained that is inevitable in music, although people don't think of it in that sense, but in the event--seeing that the event doesn't trigger itself, at the point of the event, but goes through our ears, our "computer" recognition, motor impulse, and nerve and muscle. I still have a very high reaction, but as you get older it gets slower, and I still run I think a twelfth, and as high as a fifteenth of a second on light impulse. You know, you can have standard tests, and when the light flashes you react. Well, you'd be surprised; you think you are fast, but then you see the graph, and here's the light impulse and here's your response, and if you're tired the response shows more delay.

Anyway, creative people like Cartier-Bresson use this anticipation factor in a highly creative sense, and he was able to get these marvelous compositions of people in motion. It wasn't only one person; there may be as many as five all functioning together. He has an uncanny sense--gestalt patterns, perhaps. We don't know how to explain it, but in many of his pictures, four or five people will be seen in the ideal moment, and that's why the title of his book, The Decisive Moment is so apt, because it is that decisive moment. When he operated the shutter, his "computer" decided the decisive moment. The real decisive moment is when the shutter operated, which was at least a tenth of a second after he'd given the signal. So, he must have anticipated in the creative sense of the term.

Adams: I can make a probe and hit this metal and in a millionth of a second I'll get a response from this dial, but that's a direct contact. But if this is moving, and it has to go through my mechanism, then operate the shutter, at the moment when I think that's right it'll be too late. So this is a terribly important thing, and I think in music it's essential, and I don't know in most photography--well, different degree I'd say in everything. You anticipate light, you anticipate your position in relation to the object. You don't think it out, you feel it out. If I'm looking at you [Harroun] I would move in such a way that that string back of you would be out, I wouldn't see it. If I can't do it, then I have to use that string, so I see it another way. But I can't say to the camera, "Move over on a track six feet and go click." When we think of all the things photographed...!!!

Mariner Photographs of Mars

Adams: I have a whole set of the new pictures of Mars taken on the last Mariner flight, and they are wonderful technological achievements. A good friend sent them to me. They're not really restricted, but it's unusual to have so many. And you see in them one of the great miracles of our time, scientifically speaking. The pictures have absolutely no aesthetic quality at all except what you read into them. Now if I were a painter, I could take some of the designs and spots and features and I could expand them, and I think if I could be there in space I could have made a better composition. But [laughter], one, I can't be there in space and, two, I'm a little too far away. And three, these don't come back as pictures, they come back as a series of bits, one to a hundred and twenty-eight numbers, and are recomposed in the computer. A picture is made, and it's only this big [gesture], as big as your thumb, and scanned with a television micro-scanner, and--

V. Adams: [In the background] Oh, don't let the cat out!

Adams: --every time the probes come across a change in density in this image, they give a different number. That relates to intensity and comes back to us as a continuous tape, and the computer is set up to receive and interpret the signal.

Now, the scanner works two ways. It records in one direction the intensity of the image and, returning, it is sending data from a number of other scientific instruments. When it goes one way, it's giving the image information, and when it goes back it's giving other scientific data gain. Hundreds and thousands of lines are involved. When you see the picture it's really sharp, this big [gesture], but

Adams: the image is only as big as my thumb to begin with. Well, that is not art. People like, oh, [Gyorgy] Kepes or [László] Moholy-Nagy or [Herbert] Bayer would say, "Ah, this begins art; this is the new art." Well, it's another reality you're confronted with, but it doesn't represent art in itself because you're not seeing and controlling it. The machine is doing it, and I don't know whether we can always control it! [To assistant, Ted Organ, holding framed photograph] That went all around the world, God knows where, and I took the tape off and it was perfectly beautiful. It has to be cleaned, though.

Teiser: Travelling exhibit?

Adams: Mrs. [Estes] Kefauver. Remember Mrs. Kefauver, the Art in the Embassies program?

Teiser: Yes.

Adams: That was part of her project. That's been out for years. And I opened one box today, a whole box, three hundred pounds of pictures and frames.

Teiser: How many photographs in all?

Adams: Forty or fifty. I've got a show! I just unpacked one to look at it. Most beautifully packed stuff you ever saw.

"Monolith, the Face of Half Dome"

Adams: Well, anyway, back to anticipation! Now, what does the artist really do? I'd go into the mountains as a kid, and I had unbounded physical energy, which is something that I don't have now. Of course, nobody realizes when they've got it, you just look back and you wonder! You know, I could climb two peaks a day with a fifty-pound pack and still want to photograph in the evening. [Laughter]

But I think the element of anticipation enters into this picture. Something tells you this is something you recognize, and you begin to see the picture--visualize it--and you make it. In the early days, in the early twenties when I was out in the Sierra with the LeConte* family (LeConte was a marvelous man, a very intelligent man, a really very important person in Sierra history), he made any number of photographs on five by seven plates--but hardly any that contain this

*Joseph N. LeConte

Adams: particular quality. They're immensely valuable as records, and they're pleasant. You know, you look at them and they bring back scenes, but his mind wasn't in the creative direction at all.

See, compare him with William Henry Jackson; he was about the same. He made thousands and thousands of pictures. Now, another man of the Jackson period--1870-1880--called T.H. O'Sullivan had another level of vision, and his pictures are always superb compositions. While the Jacksons historically were tremendously important, O'Sullivan had that extra dimension of feeling. You sense it, you see it. This Half Dome picture* of mine [on wall] was my first really fine photograph. (I was ready to say, "Well, maybe I should have stopped and gone into the ready-made clothing business.") Because this was my first real visualization. I felt the monumental quality, I saw it intensely. I had two plates with me, I took one with the standard K2 filter, and I began to realize, why, I'm not creating anything of what I feel, because I know the shadow on the cliff is going to be like the sky; it's going to be gray. It will be an accurate picture of Half Dome, but it won't have that emotional quality I feel. I had a deep red filter and I used it on my last plate. And that's the interpretive result--that's what I felt at the time.

Literary Titles for Photographs

Adams: And this might be the time to bring in the term "equivalent" that Alfred Stieglitz used, because he made the bridge between the pictorialists and the creative people. Very difficult! Even today, the so-called pictorialists have to title everything, you know: "Autumn Tranquility," or "Mine Eyes Have Seen the Glory," or "The Smile of Spring," and all this incredible [laughter] literary imitation. And Stieglitz said, "Of course, it's all right to say this is 'Fifth Avenue, Winter;' that's fact." Edward Weston would say, "Cyprus Number Twenty-three, Point Lobos." But when you begin to say, oh, "Time to be Home," [laughter] you know, that's an awful thing.

Well, anyway, Stieglitz tried to break way from that with the idea of saying, "When I see something I react to it and I state it, and that's the equivalent of what I felt. So, therefore I call my print 'equivalent,' and I give it you as a spectator, and you get it or you don't get it, you see, but there's nothing on the back of the

*"Monolith, the Face of Half Dome," Yosemite Valley, 1927(?). See also p. 38 and other entries as indexed.

Adams: print that tells you what you should get. I put no literary title." That was a very important thing, and I instinctively felt that way back in the twenties. I rarely if ever gave a title, a literary title. I'd give a definitive title like "Rocks, Bakers Beach" (if I had only put the date on it, Newhall would have been happy), "Golden Gate Park Number Sixteen," or "Red Slate Peak," and sometimes "Red Slate Peak, Evening," another might be "Red Slate Peak, Morning." But it was never a literary thing. This is terribly important, to avoid this--I call it literary; maybe that isn't the right term. I think from the very beginning I was relatively free of that because after going through a certain stage I was in, in photography and music, I realized how shallow it was.

Teiser: It not only is literary, or romantic, or whatever, but it also reflects what the picture is like. I mean, you don't find that kind of title on a picture that would be called "Rock and Sea."

Adams: You're right there.

Teiser: I don't know what I'm trying to say, but--

Adams: The person who would accept that philosophy of a title could not do a Weston-approach picture, you see.

Teiser: That's what I'm trying to say.

Adams: Yes. I remember one of the criticisms that got me really worried was James Huneker, the great music writer, critic for the Globe or New York Times or something, but boy, was he florid! Wow! And his discussions of Chopin's Sonatas and other works were memorably bad. Now, the sonata is usually in four movements, and in the B-flat minor Sonata of Chopin you have the "Marche Funebre," which is the Adagio, and in which he took the mode of the funeral march. Now, actually, it should be played with the utmost stylization, without thinking of a funeral cortege. It's been interpreted so that people always relate it to a funeral, but it's actually a theme, not a theme but a structure. Otherwise you have just a funeral march.

The last movement is Presto Furióso, and is an awfully difficult thing, with terrific surges of sound. Huneker ruins it for millions of people by saying, "This is the night wind rushing over the graves." You see, it immediately cuts off a whole dimension because it's so trite. That's part of the philosophy that you have to contend with with me. I avoid this aspect of triteness, and if I ever slip, please, you know, take me up on it because I might make allusions sometimes that might give you that impression. But it's very easy to get emotional.

Portraiture

Teiser: Somebody with an unpracticed eye would look at Julia Margaret Cameron's portrait of Tennyson, say, and then look at a turn-of-the-century pictorialist portrait and find them similar. What's the difference?

Adams: She was--I don't know if we can say she was a dichotomy, but she exhibited a dichotomy in the sense that most of her pictures are the most sickly, stylized, posed, Burne-Jones compositions of wan, tubercular maidens in white drapes, and--boy, are they sentimental! I mean, they're really Victorian! So that's part of Julia Margaret Cameron. And they're awfully good for their time. The next step, and the important thing, is when she got these great people to come to her country house. (This is the story we get.) She was apparently a very well-to-do woman, and had the equivalent of a salon, and the people who'd come to visit would be trapped and photographed! But what she did was so intense, and the magic in that is not just putting somebody up in an iron brace and holding them for fifty seconds (the poses were very long), but developing an empathy or a sympathy between them. So when you see the picture of Carlisle, Herschel, or even Tennyson, there's something happening there that's far beyond the ordinary photographs of the time--exposures of thirty seconds or more, with the head gripped by the support. Her photographs had motion, they moved, but that does not bother us. You are aware of their great intensity.

Stieglitz did the same thing. He took portraits of [John] Marin, and he'd believe if a person would sit relaxed for a minute or more, something could come through that would never appear in a snapshot. That's only a slice of time. That's another thing that Cartier-Bresson did superbly: the anticipation of the body movements and facial expression. And you know most candid photographs are simply horrible, people speaking with their mouths twisted open or showing incomplete action, etc. You have to study the person, and you have to be speaking with him if you're doing a portrait of the speaker. You phrase his passage or sentence, and just as he's ended the phrase or sentence you may photograph--because at that moment his face may have a moment of logical repose.

And Cartier-Bresson, and, again, Gene [W. Eugene] Smith, and many other people in that field have that sense. The person-subject does come through. But the difference between Cameron and the average professional at the time was not that there was a romantic stage set involved. I think there was just a very intense personal relationship. The subject and photographer knew each other, they were friends, and they knew what she was trying to do. There's no resistance, and there's no passivity in evidence.

Adams: Minor White made a big contribution in discussing portraiture in the sense that it really was a stage play, a dramatic play. One character was the subject, another character was the photographer, a third was the camera. The interplay wasn't just between you and me, but it was between you, the camera, and me. And sometimes this was very vague for people to understand, but he did some very spectacular portraits on that philosophy. You're really getting the person to feel that they're part of the camera. That's what happens when you're doing what's called "first person photography," when they're looking into the lens. Most photographs you see, they're not looking at the lens, they're looking over there or at the photographer. It's all right to look here or there, but if there's slight indirectness the effect is disturbing. When I talk to you and look this way at your collar, why, it'd drive you nuts after a while. You'd think I was, you know, ashamed, or afraid, or weak. You see the difference? I don't know whether you can see my eyes, but now you're the camera, and I'm looking at you. Now I'm going to focus on the tree outside. Do you see what happens? The eyes diverge.

Teiser: Yes.

Adams: It's an extremely small point, but it's absolutely a dominant factor in portraiture because it can be so ugly and so unhappy to have a portrait of a person four feet from the camera whose eyes are focused on a hundred feet or infinity. I'm talking to you, and if I had my camera over here, these would all be crazy pictures, because it wouldn't be far enough away. If I had the camera over there [gesture], by accident I might get something, but of course, I wouldn't know. So that's why the camera itself, with its single-lens reflex design, or just the view-camera ground glass, the image (not the finder image) is so valid. That's what's so wonderful about the new Land camera [the SX70], the beautiful accuracy of the finder. You're seeing exactly what the lens sees.

Teiser: This question of focus, is that a factor in the [Yousuf] Karsh portraits?

Adams: Karsh is never very satisfactory when he has a first person. He has the ability to make everybody look alike, because he uses a very consistent lighting without much regard for the person. I mean for mood. The lighting, mechanically, is superb. When he photographs a profile of somebody looking away from the camera he achieves very impressive results. But when he has people looking almost at you, then his portraits may go to pieces, because they're not looking at the lens, they're looking at him, or looking a little above, or to the side. The Hemingway picture and several others, the subjects are looking above his head.

He has a habit--he made a picture of me at a stockholders meeting at Polaroid several years ago, demonstrating a new big

Adams: format that hasn't been developed yet. He was going to take a picture of me, and it was to be processed right there in the camera, and then it was to be put in the printing press. This was called Project India. It's a remarkable thing. It means that you will take a picture, wipe the developer residue off, put it on an offset press, and you print a hundred thousand copies. This because the print is a screen plate.

I would have simply said, "All right, take the picture but we'll rehearse it if you want." He got so nervous we rehearsed it four or five times. He'd never used this process before, you know, and they had everything set: they gave him everything he needed. He'd come in a private jet from Ottawa. I was getting awfully tired, because I was supposed to be the subject and should look "bright." We had worked everything out and had everything gauged to a quarter of an inch. But when Karsh made the picture, he'd take the cable release and look at you, and then he would do this [lifting eyes], and so everybody sort of does this "lifting up." And it's a secret. Everybody in his photographs has almost the same "lifting" expression. I saw him do it with several people. He just sort of does that and you go along too. [Laughter] He just sort of transmits a lift.

But of course, his lights are right here: they're blinding. They glare, you know. Whew! [Laughter] And then after he did this, here are these two thousand people out in front, and he's just white with fear. They process this thing and out comes this picture. "Well, that's pretty good, Karsh," Land says. "It's not your fault. I know Adams can look better than that. Can't we do it over again? Sure, the picture came out fine that way, but let's get a better one." By that time Karsh was just ready to be put down the Disposall, you know (and so was I). So finally we get the picture. "Well, that's pretty good." And he turns it over to his assistant who washes it off. He then puts it on this little press, and there's a print for everyone in the audience. [Laughter] Very nice offset print. But the sense of portraiture is that extraordinary moment of understanding people. And a good professional portraitist is pretty much of a psychologist. Are you a pompous businessman, are you a slightly timid housewife, are you a dowager, are you.... And I have failed many times with all these types!

I remember doing a portrait of Mrs. [James] Rolph, the governor's wife, and I just expected to do her head, but, no, she had the inaugural gown on. Well, I didn't have a studio--never had a studio in my life with equipment to handle that, because somebody standing against a simple wall in an inaugural gown is one of the silliest things you can imagine. The light was all wrong. She was very nervous, and she said, "I hope you know, I'm getting a little fleshy, and I hope you'll do a proper amount of retouching." And I said, "Good Lord, I never retouch anything." So, I made about ten pictures of her, and they were perfectly horrible. They were so God-awful,

Adams: but I sent two proofs on. She thought one was simply lovely and wanted to get retouched prints. So I thought, oh hell, I'd send it to a retoucher and let somebody do it, and let them have it, because I was obligated to get them a picture, but I had to cut the thing down to kind of a panel. The inaugural gown, you know; I had to print the thing down. If you do a thing like that and if you have a studio and all kinds of lights, and you simulate a room or something, you might produce an "effect." But imagine somebody in an inaugural gown standing in front of this fireplace here, not in a plush San Francisco home--it does not work! [Laughter]

Manzanar

Teiser: Your portraits of people in the Japanese relocation camp at Manzanar have a great immediacy.

Adams: Yes, and that's a very interesting thing. This doesn't belong in this section, but I'd better tell you about it.

Dorothea Lange and the group*, at the time of the exodus, when they transported the Nisei to the camps (which was a really tragic time), made photographs. They had a very grim sociological picture of this event, which was a very grim event, no question about that. Then I came along at a much later date. I was up in Yosemite and was griping that I couldn't get anything to do in the army or navy, and I wasn't going to just be a sergeant photographer. At first I thought I'd have the darkroom for Steichen**, and then, well, they got somebody else. I was just too old to do this and just too young for something else, and I was really griping.

But Ralph Merritt, who was a great man, was the newly-appointed director of Manzanar, and he came to see us in Yosemite. And I told him, "I've got to do something. After all, I'm feeling like--not a traitor--but I'm perfectly well, and I have a lot of ability along certain lines, and I can't get in any photographic thing to do in the defense picture. They don't want photographers." Brett Weston was an extremely competent photographer. They put him cleaning film, which is closer to photography than most photographers were. But if I were a young man trained as a photographer and had joined, I'd have been made a cook.

*working under the War Relocation Authority.

**Edward Steichen served as a captain in the navy during the war, in charge of combat photography.

Adams: But these kids who'd graduated from high school, they had already enlisted in the Signal Corps, so they were already designated. Maybe they ended up as cooks, too, I don't know. But when I got to Manzanar--oh, yes, let me go back.

Merritt came to Yosemite and told me, "I've got a great project for you. Can't pay you a cent. I can put you up. I can get you gas mileage, and I can get you tires, but I can't pay you a cent of salary. This is something if you want to do it; we'll do everything we can." He said, "We think we have something at Manzanar--(Hello, Ernst!* One moment, I'm on a tape!)--we think we have something at Manzanar. We've been able to get these people in all their destitute, terrible condition to build a new life for themselves. A whole new culture. They're leaving here with a very good feeling about America. They know the exodus was a fundamental wrong, but they said, 'This is the situation--make the best of it.' If you can photograph that, it's a very important part of the record."

So I went down to Manzanar and photographed, oh, hundreds of people, and practically everyone was positive. They'd rejected the tragedy because they couldn't do anything about it. The next step was a positive one. And I had them smiling, and cheerful, and happy. And the photojournalists raked me up and down over the coals; you have no idea. "Why do you have these people smiling? That's all fake! They were oppressed, prisoners." And so I tried to explain what really happened. Because of this adversity, about which they could do nothing, they became a marvelous group of positive, forward-looking people. They were the lighting candles type, you know, and that's the way you see them. You look at this book** and you see many who are very pleasant, and very happy, and beautiful kids, and they really did a magnificent job of establishing a life out of chaos. And I think that's my most important job. Although, conventionally I should have shown them downtrodden and unhappy and dirty--which was not true!

Teiser: You wrote the text, too?

Adams: Yes.

Teiser: As I remember, the copy I saw was poorly reproduced because of wartime paper, and--

Adams: Oh, terribly. Tom Maloney, U.S. Camera, just thought this was one

*Ernst Bacon, composer, who had just arrived to spend the weekend.

**Born Free and Equal. New York: U.S. Camera, 1944.

Adams: of the greatest ever. He was so glad to publish this, to recognize these people, and he thought American citizens would respond and it would sell. Only about 3 percent of the bookstores and news stands would carry it, because the Japanese were the "enemy." They never paid any attention to the philosophy.

I must have had twenty, twenty-five letters. Some were very touching. One man wrote me. He said, "Well, I've lost three sons in this war, and you're glorifying our enemy." And I had to write back and say, "Those in my book are American citizens. They were born in this country, and their sons who were in the army would come to see them." But their hurt was so great that there was no reasonable solution to it. It was really quite a tragic experience for me.

Teiser: I should think.

Adams: I think of what's going on in the South. This [George] Wallace business, and the fact that "if you're a nigger, you're a nigger forever," you know. And if he was a "Jap," whether or not he was born in America, he's still a "Jap." The subtle thing was that the old man that we had working for us for many years as family companion, gardener, and cook, Harry, was an Issei, was born in Japan. He was picked up on the second day of the war because he was a Japanese national, and we just got a telephone call from a friend, "Harry Oye has gone to intern camp." Well, that's expected during a war. He had asthma. The government treated him incredibly well. He went to hospital after hospital. He finally went to Missoula, which was the best for his asthma. He had the best of food to eat. He was completely comfortable. He would write us letters which would have the censor's stamp on it in red: everything is fine. He comes out to us after the war. He looks fine. He was really extremely well treated. He immediately applies for citizenship and gets it.

So Harry Oye at the age of seventy-something becomes a United States citizen, treated ten times better than the United States citizens who were picked up by General DeWitt and moved into the relocation camps. And that's the story that I tried to tell! We followed the--what do you call it--Geneva compact, and prisoners of war were magnificently treated. And, when he told us about where he went and the doctors he had, and the care--and he was a prisoner of war! [Laughter] The American citizen who just happened to have a Japanese grandfather, oh no. He was put right in the internment camp. And some places were very bad; well, not very bad, but dismal.

Manzanar had a beautiful setting. I always tried to bring in the environment of the mountains. I knew a great many of the people would look up at the Sierra Nevada. It was a beautiful place. Merritt let them go out of the camp and collect rocks and helped them get shrubs and build a Japanese garden. Just absolutely

- Adams: beautiful. They had water running and flowers and shrines. I can still pick out some remnants; they're still there in the desert.
- Teiser: Did you ever show all those photographs?
- Adams: They were shown in the Museum of Modern Art and were very severely criticized.
- Teiser: At the time?
- Adams: Yes. People criticized the Museum and criticized me. It was a very difficult thing. And even some of my liberal friends said, "You made a mistake that time. You just got yourself in hot water." We were talking about it. They said, "It's not the thing to do. Japan is the enemy and you shouldn't have done it." Nothing could be further from the truth. So I really think I can go on record as saying that from the social point of view that's the most important thing I've done or can do, as far as I know. I don't know what'll happen tomorrow. But it was a great experience.

Early Days and Scientific Concepts

- Adams: Well, I'd like to go back to earlier days and people that I knew. I'll never forget the doctor for us out there, a little woman called Dr. [Ida B.] Cameron who lived on Twenty-fifth Avenue and practiced homeopathy. And she would come over and see me when I was laid up with a cold or something, and she'd have her little sugar pills containing one billionth of a gram of something. Of course to my uncle who was an allopath, this was like what's going on in Ireland with Protestants and Catholics.

Homeopathy is "like cures like." Strangely enough they've found out lately that some of this theory may work. [Samuel] Hahnemann I believe was the man who developed it. But there were many, many family doctors who were homeopaths, and would give these tiny little sugar pills in a solution of alcohol with an incredibly small amount of a certain chemical. But you got over your colds. And they never would extend into anything serious, appendicitis, or surgery, or anything--no kidding on that. They were really highly trained doctors with this specific philosophy. It bordered a little bit on the acceptance of acupuncture. Nobody could quite understand how it worked, but it's probably the conviction up here [in the head] that does it. But you still see the Hahnemann Hospital out by the Children's Hospital, and Hahnemann was the father of homeopathy. It was just a "school" of medicine. [To Ted Organ] (My friend, I know that you are busy with prints, but could you remind Jim that I am

Adams: kind of dry and I'm becoming very eloquent, and this tape is very important. A little vodka, a little ice, and a lot of water.)

Dr. Cameron had a great deal to do. She was the one we would count on, and she was a very intelligent woman. So I had right in the immediate neighborhood Miss Marie Butler, my piano teacher, and Dr. Cameron (I forget her first name, it will come to me).

Then a family, Mr. and Mrs. Sattler, came next door and built a house and cut out our view. My father when he saw the plans said, "Can't you arrange this some way so you won't kill our view?" And, by gosh, they did: my father, who was very broke, got a bill for twelve thousand dollars. A demand. It was their court order because they were going to build. Now, there's a strange thing about the law. They were on a very steep hill. It would have cost twelve thousand dollars to build the retaining wall, and we didn't have anything.

My father went to a lawyer and he said, "What do I do?" He said, "How far is your house from the property line?" He said, "Fourteen feet." "Twelve feet is the limit. They have to hold up the property." That two feet saved us. [Laughter] So he told Mr. Sattler, "I'm sorry, I don't have the money and I was very worried, but I consulted my lawyer and the lawyer says you're beyond twelve feet." He said, "Well, I tried, but I'll hold it up. But," he said, "maybe we can get some dirt from your property." My father said, "Oh, yes." And we got along fine. So everything worked very well.

Teiser: But it did cut off your view?

Adams: Well, it cut off a good part of it, but still he moved back enough, you see, which is more than most people would do.

The [Matthew A.] Littles built on finally in later years, and cut it all off. Their name was Sattler, and she was a Christian Science practitioner, and she tried to influence me in Christian Science. Really, you talk about missionary work! There was always something strange about it, because I was interested in astronomy (through my father) and science generally, and then to be told something totally unscientific was a surprise. I began to develop a resistance, and argue--I remember this as my first experience of being confronted with a very smart, very good mind, but it was on a very difficult track for anyone like me to comprehend. But the words "science" and "Christian," and "there is no such thing as evil"--well, that was an offense to my kind of thinking in which two times two does make four. I can remember that we had poison oak. "Poison oak is a beautiful plant; it will not affect you." Well, I was tremendously and sadistically impressed one day when this woman came down with the worst case of poison oak I'd ever seen. And when I asked her about it, she just said, "Well, I just let evil triumph." [Laughter]

Adams: This was an interesting little phase, one introduction to what I call reason and anti-reason. That was very important at the beginning, that I had something to talk about with these people.

Then I met, later on, Orage, A.R. [Alfred Richard] Orage, who was a disciple of [Georges Ivanovich] Gurdjieff. Gurdjieff was a great mystical philosopher along with [Petr Dem'ianovich]. Ouspensky. I don't know whether he was related to the Gestalt theory or not. And Orage was an extremely clever, smart man, and a good friend. But he was absolutely scientific, you see. There was nothing phony about him; except that sometimes he'd make some assumptions we'd have reason to discuss.

The 1915 Fair

Adams: And then another very rewarding thing that comes back to me: the 1915 Fair [the Panama Pacific International Exposition]. My father was very unorthodox. He took me completely out of school and bought me a season ticket. I went practically every day to the Fair, and I went through practically every bit of it. They even let me demonstrate Dalton adding machines.

They had--I didn't realize it at the time--one of the greatest, most significant shows of modern art, contemporary art, cubism and so on, in the Palace of Fine Arts. A phenomenal show. It's been written up lately. I do not think people realized what they had in San Francisco at that time. Here were all kinds of geometric structures, see, and I remember talking to a man, but I didn't realize who he was at the time--but he was one of the great museum people in the East; I forget his name. But there were several people around, and I said, "I don't understand." I was kind of mild, you know. He said, "What is it that bothers you?" I said, "There are really no straight lines in nature." (A well-known sculptor had made a gutter-like figuration.) Several of the people standing there looked at me--brat, you know, talking about straight lines in nature. Well, he could not give any answer to it. I'll never forget this awful ten minutes in which he said, "I can't answer you on that--there are straight lines in nature, in some cases." "Yes, I know, there are some straight lines in crystals, and fracture planes, but 99.9 percent of nature is a fluid thing, which isn't the least bit concerned with a straight line. There isn't a straight line on the body." Of course I was embarrassing him because of this audience.

Well, I went over there about two weeks later and he was there, and he said, "My boy, you put me on a very bad spot, and I've been doing a lot of thinking. I think I could continue the argument, but

Adams: thank you for putting me on that spot." I'll never forget that. "Because," he said, "you know, you did bring up something about the difference between nature and the intellect," and that the mind sees straight lines, like [Percival] Lowell and [Giovanni V.] Schiaparelli saw straight lines on Mars, the "canals," which was a visual phenomenon of disconnected points.

But I can remember these things, and reacting very strongly to many of the paintings, and reacting very badly to the sculpture. The paintings were abstract; you could do what you wanted with them in your mind. But in sculpture you had a tangible thing, like a rock or a tree. I had a terrible time with some of the sculpture.

Teiser: Have you looked at pictures of any of that art recently?

Adams: Yes. I often recognize a lot of the things I saw.

Teiser: Was there a good deal of Rodin there?

Adams: Yes, but not in this show--all this was avant-garde at that time, early Picassos--oh, I can't remember the names. They'll come to me, but this was largely the Dadaist group, you see.

Teiser: The sculpture of the Fair in general...

Adams: Oh, the sculpture of the Fair was God-awful. Who was the man who did the firemen saving the child down near the cathedral in North Beach?* Oh, the Fair itself was just filled with the most God-awful, bad, romantic and arid sculpture imaginable. "End of the Trail," Stella--boy, was that daring! That was this nude--a terrible painting, but the most popular. But the avant-garde thought this was a very special show, one of the most significant shows ever put together in America.

Teiser: The painting, however, what sort of painting was it?

Adams: Oh, now you've got me on names again--Picabia, Picasso--

Harroun: "Nude Descending Staircase"?

Adams: Duchamp, yes, he was in that group, I am sure. That was my first exposure to the nonliteral contemporary art, and it made a great impression.

[End Tape 1, Side 2]

*Haig Patigian.

[While the recording tape reel was being changed, Mr. Adams mentioned his admiration for his house guest, the pianist Ernst Bacon.]

[Begin Tape 2, Side 1]

Adams: The only person who compared with Ernst Bacon who ever played here was Victor Babin--of Vronsky and Babin, duo-pianists--he just died, you know, two months ago--old friends. Last time they were here and spent the weekend, we had some vodkas and reminisced and he played Scriabin and you never had such an experience! A beautiful pianist. I've been very fortunate in my friends.

Now, let's see. Where was I?

Teiser: You were telling about the 1915 Fair.

Adams: The 1915 Fair. Well, I saw a great many things. The organ in the Festival Hall is the organ that is now in the auditorium in San Francisco. It was a very good one. They've improved it, but it had then great power. Being interested deeply in music, every noon I went to an organ recital. And then I had some friends who managed to let me play it a little. Then I studied organ after that.

But a very interesting story. You've heard of Tom Mooney and the bombing?* Well, Rena Mooney was quite a fine musician. I met her at the time. She wanted me to be her pupil. She was very aggressive, but I didn't quite--I didn't think she was my cup of tea, although I liked her personally. Tom Mooney worked for the Underwood Typewriter Company as a technician. They had, I guess, one of the greatest illusions of its time. The audience would look onto the stage. There would be old people writing with quills. It would gradually and beautifully fade into people with pens in their bookkeeping shop in London. And then the picture would gradually fade into 1890, 1900, ladies working old typewriters. And then it would gradually fade into a new place. Well, this illusion just fooled everybody. It was fantastic. He showed me how it was done one time. It was a great mirror system and revolving stage. Very advanced. And the lights would go down and the stage would move, and the next one would come in and this one would be illuminated and picked up in the mirrors. The mirror was the biggest glass I'd ever seen.

We were very good friends. And imagine the shock one morning, seeing in the paper that Thomas Mooney was accused of the bombing, the Preparedness Day bombing. And there was his picture. This was the guy I'd known during the Fair, and a very kind, gentle man.

*The Preparedness Day parade bombing, 22 July 1916.

Adams: Well, they were rather politically radical, but they didn't think I was old enough to understand this, so they didn't talk much. But this was a trauma. To suddenly see, for the first time in my life, a picture on the front page of the paper, of a guy that was accused of perpetrating that bomb outrage--it was terrible--a man that I'd had a close association with as a good friend in my rounds of the Fair. So that was my first brush with "reality."

Teiser: Do you remember the photography that was around the Fair?

Adams: The Camera Club show was so dreadful I looked at part of it and just left, and the photography of the Fair, the commercial photography, was, of course, competent but very bad--all their guide books and things--terrible stuff. The whole Fair was the most amazing thing.

The Tower of Jewels was a geegaw, the biggest curio ever made. And yet there were some things that were absolutely beautiful. Of course the whole thing was a totally traditional plan. You had your Venetian towers, you had the Alhambra Spanish courts, and the architects really went all out.

The most impressive thing (the most curious thing I guess I can think of) was that they had this great locomotive out on a pier, which would generate steam--phsssh!--running on, just rotating wheels. It would put up these tremendous clouds of steam on which colored lights would play, and then fireworks were released back of it. Well, the thing was a fantastic spectacle. I mean, Dufy never painted anything like that!

And then we knew [Bernard] Maybeck, and of course he did the Palace of Fine Arts, and when that was lit up at the time of the Fair, it was an extraordinary experience. A wonderful thing. At night it was a real fairyland (I mean if you want to use that corny term now). It was fantastic. And when they didn't take it down along with the other buildings, Maybeck was disturbed. He said, "This is not a permanent building! This is a fantasy! This is supposed to go!" Oh, it was a beautiful building. To let it stand after the Fair practically broke his heart, because in the cold light of day, with the city around it--you know, it was a bit crazy. And then a few years ago some guy spent six million dollars reproducing it! Maybeck has been rotating in his grave, I am sure. [Laughter]

This is an interesting thing. I wrote a very strong letter to this man and never got an answer. I said, "You're spending six million dollars to perpetuate something which the architect was broken-hearted wasn't terminated at the end of the Fair. The Fair was a true Renaissance concept. Ninety percent of the Renaissance was not permanent. It was festivals, sets made, performances. What's

Adams: come down from the Renaissance is mostly a lot of old monuments and great style, but retaining that structure wasn't in the spirit of the Renaissance. It was a very alive, transitory thing. I said, "If you'd just taken that money and turned it over for contemporary art and architecture, it would have been an infinitely greater balance." But it's a monument. That guy put six million dollars into duplicating that building. Can you imagine? It was originally built, very well done, with a steel frame. Then it was faced with fake travertine. I forget the name of the man who developed this, but he could imitate any kind of marble or travertine that you wanted by mixing clay, plaster, and color, and get the illusion--like Mrs. Spencer* in Yosemite did a stylized fifteenth century glass window she made of parchment. And people knew it was a derivation from Sainte-Chapelle; that was her great theme when she was in Europe. They looked at it and they were astounded. It is a stained glass window, but it isn't like anything that's ever been done; it's all parchment. But when you look at it with the lights behind it, you can't believe that you're not looking at a perfectly gorgeous, luminous window. That goes up every Christmas, and comes down afterwards, and nobody wants to perpetuate it through the year.

Religious Concepts and Cemeteries

Teiser: Going back to your immediate surroundings when you were a youngster-- you were naming the people who influenced you, and people you had known. You took Greek lessons?

Adams: I took Greek lessons from a Dr. Harriott, who I think was Canadian. He was a minister, a total fundamentalist. And he was a terribly good Greek teacher in the imitative sense. I mean he'd make you write, go all through your verbs and nouns. And his pronunciation was, of course, English. I don't think anyone knows how to pronounce the original Greek, but this was the accepted English pronunciation. I read a lot. I read Homer, the others, Pindar, etc., and I could read it, by gosh. But he said, "What do you do? What literature do you read?" He was a pompous man, very stuffy. His wife was a little white woman, scared to death of him. He had a bristling beard. He said, "What do you do? What is your favorite literature?" I said, "Well, I have to confess, poetry. I just love Shelley." "Oh--heathen!" He said, "You should be concentrating on the word of God. Do you read the Bible?" "No, but we do have a family Bible." (We had the births and deaths on the front page.)

*Jeanette Dyer (Mrs. Eldridge T.) Spencer.

Adams: Well, by that time he was just ready to pop a cork, you know. And I said, "Well, you know, we're not a very religious family. We're scientists. My father's interested in science, and we can't believe this fundamental--" "Oh," he said, "this is heresy! The world began 4004 B.C. and," he said, "every God-fearing person must accept that. This is the truth." And I said, "I can't--" Then, "Dr. Harriott, how did all these fossils get in the rocks? You know, four thousand years is not--" "Oh," he said, "my dear misguided boy, God put them in there to tempt our faith." [Laughter] And from that time on, my whole concept of traditional fundamentalist religion held to a very low level. I actually heard that mythical "fact" stated with total conviction. And I can imagine an old man with a beard, with the kindest intention, running around in millions and billions of rocks and poking in fossils, to tempt the faith of some creature he invented in the very last varnish layer of the historic column. [Laughter] But that actually happened to me! These people are right around here today who would say the same thing.

Oh, another problem I had was with a man who was a physicist, and he got talking about what church I belonged to, and I said, "I don't go to church." He said, "I don't understand it," and I said, "Well, are you a Catholic?" He said, "Oh, I'm a devout Baptist. I actually believe in the Bible." I said, "Look, you're a physicist and a mathematician, and you can't really believe certain things, can you?" I forget his exact words. (This came along later.) He said, "My dear boy, you don't understand. Faith is one thing, and knowledge is another." And you know that was a great shock that somebody could have all the knowledge in the world and yet have a faith that denied it. Those things are perhaps formative things in one's life.

This is probably a good time to say that my very dear friend Dr. [Edwin H.] Land of Polaroid--really, a great genius in science and technology today, and his heart is as big as his mind--he was talking about problems, solutions, and human directions; we all have human and political problems. And he said, "The key to the whole thing is a clinical approach and ability in 'management' of any situation." In other words, if something happens, if something hits you, you should immediately become "clinical." Don't let your emotions take the control from you. Just analyze what's happening, and then when you figure out what's happening, then you may begin to manage it. You don't deny it, you don't condemn it, you just say, "Here's the situation, and one parameter is here and another there," and you solve it. The instant you become emotional, resentful, or over-respond--you have lost.

Jim Taylor: It's getting time for dinner.

Adams: All right. Tell them to hold it. We're doing fine.

Teiser: We'll stop whenever you like.

Adams: Now, a very interesting thing that really goes back to the twenties. I'm not a victim of necrophilia or anything to do with death. Cemeteries have two qualities. One is human in the sense that one human being is putting up some kind of a stone which relates to another human being. In many cases on that stone are carvings, sentiments, indications, which is profoundly human and is, in a sense, folk art. So I've always had an interest in such things. I've got a tremendous collection of cemetery stone photographs. Dr. Land has said, "I see so many pictures of tombstones. You come here, I give you a new film to try, and you go to work in Laurel Hill Cemetery!" I say, "Yes, because the stones are static. Some of them are very beautiful and I can work thoughtfully on them."

This is a theme that affected me and affects a great many photographers. The early gravestone carvings and sentiments are a link--the closest link I know--to the past. And you get that assurance in New England in the old graveyards; you really sense a contact with past humanity, and the stones photograph beautifully.

I have one negative here that I've been working on for years. It was a little thing from Laurel Hill Cemetery. It's gone; it's part of Bay breakwater now. It's just a sphere, a little spirit, a little angel leaving, floating off. Probably when it was made it might have been corny, but it was beautiful with age and erosion. I'm going to make a print of that if it's the last thing I do, because it's one of the most beautiful, poignant images, and it relates so wonderfully to so many themes. Here is the earth, the symbol of the crescent, and the little spirit leaving it.

So to make these junctions between expression, personal feeling, history, we can then send tentacles out to other people through art. The human interpretation of history is just not dates and facts but, as my friend Newhall says, "We historians don't think of the past or present, we think of a continuous line." And now a lot of people want to cut life into periods--everyone tries to compartmentize it: contemporary art, new sculpture, pop art move in--in all such compartments. Any good art historian goes around a great ellipse, you see, right back to the pre-Egyptians. And we just came across some pictures today of some Egyptian things in the Boston Museum. And you look at these pictures, and they have qualities which a lot of the contemporary artists are really trying to capture in the new mediums.

So my interest in cemeteries is not anything to do with death, or even the fact that the art is "art." It's a kind of a folk art, but it has a tremendous human significance. It's just a theme which because I suppose it stays quiet [laughter] I like. So I have a very

Adams: complete set of Laurel Hill Cemetery pictures in the late twenties and thirties. That little figure--see the figure on the urn?--that was the most beautiful gravestone there, and I went over and I talked to the guard one day and I said, "Where's that going?" And he said, "Oh, that's going down to the breakwater." I said, "I'd like that. Tell me how I can buy it, anything; I want it." He said, "Ahhh! Scram!!" But I went back the next morning and found it had been broken up, and I pinched just this little part, which I think remains a perfectly beautiful thing.

Now the contemporary gravestone is a horrible thing. But these early ones were really carved. There's one stone in Utah, I think Glendale, that was done in 1890--something by an itinerant sculptor who went around the country when people were trying to carve primitive stones. This one could have been done in the middle thirties; it relates to contemporary sculpture. It's one of the most beautiful things I've ever seen. I just hope it hasn't been vandalized. I have several pictures of it.

Teiser: Your photographs of the sculptures in Sutro Heights--

Adams: Yes, I've a series of those.

Teiser: Are they--

Adams: Well, you see. The whole Sutro thing was a great colossus, a benign fake. This man [Adolph Sutro] was very wealthy, and he bought these things made of cast cemental imitations of classic sculpture. They still had their own nostalgic value. The one I have of a woman classically draped and looking down on Seal Rocks is still one of my best pictures. From the point of view of art, it's an atrocity, you know, but here again is the "nostalgia" thing (a bad use of the term). What that meant in history was related to the concept of the benign ruin. Sutro really wanted to accomplish something, and could buy anything he wanted. Sutro Baths, you know, was his private indulgence. So with the idea that "classic" was the "in" thing at that time, he ringed this parapet with these statues. I remember them when they were complete. I wish to goodness that I had been able to photograph them all. They were of cast cement, and they didn't stand the salt air erosion, so they weathered within relatively few years and gradually went to pieces. But I have the torch bearer, a woman, and I had another one that was burned up in the fire in Yosemite (unfortunately it was the best one).

Aesthetics and Ecology

Adams: All those things are so poignant because they meant so much emotionally to me, as I was at the time exploring several parameters of thinking and doing--into society, into history, aesthetics, and nature. And the whole thing makes a complex, abundant, and eventful pattern. So it's awfully hard for me to point out any one thing, you see, and say, "This is important," because it's sure to tie in to something else. I often went down to Bakers Beach. A beautiful fog would be coming in, and great waves--but you talk about pollution! The sewer for the whole Western Addition dumped off the beach, so you had to watch your step. Nobody ever thought anything about it. That didn't affect it any; the beach was still beautiful. I have a picture of my mother and father and me about this big [gesture] (I don't know who took it) sitting on the platform of the old lifesaving station at Bakers Beach, and you know, such an image brings you back to the particular qualities of the world as it was at the time when it meant so many things to you.

If the beach was in that condition today it would be roped off and covered with warning signs! You wouldn't come within a quarter of a mile of it today. But I lived! I mean this is a very important thing. The average human society lives in a biological slum--India, for instance, is a prime example--and up until just recently, a half century ago, we really lived in filth. We had garbage all over. We didn't worry about anything. You'd go into the Sierra on a camping trip, and there were so few people you knew the water was clear, but even back in 1912, I think, William Colby got typhoid fever from some high mountain stream.

In some ways we're so damned sterile today. Probably that's one of the things that's the matter with us [laughter], that we've achieved sterility and we're not conditioned. My son is a doctor, and if one of the children drops something on the floor they have to eat it. They should absorb germs, they should develop a resistance. What is there on the floor? You walk outside, well--if there's an epidemic, if there was something here we'd take care of it in another way. So my whole experience at Bakers Beach all my life was that the sewer emptied into it, and literally the whole mile--the whole coast there--you had to watch your step, if you know what I mean. But it didn't make any difference. That was it. The situation--what do you do? You manage it. You watch your step.

Teiser: What you were saying of Dr. Land--*

*See p. 33.

Adams: Yes, Dr. Land's incredible ability getting along with people, situations--just don't react, except to art--art and music. But you come across a situation with people, don't feel worried about it. Just say, "Now, what's this situation?" You'll usually find out it's something that can be solved. Maybe it can. Maybe it's a sour marriage over here, or somebody wants to put Mama in a retirement home over there, usually bothersome family things. Other things become emotional--you get mad because someone's appointed a director of a museum, and you know he's a fake, and you think, why was he appointed? He had something to offer, and if he offers it and achieves it, it's all right. If he doesn't, they'll get somebody else. Don't worry. And clinical things. Although Dr. Land is concerned about the situation now (he thinks it's pretty bad), he is one of the few who could point to a way out of it. There are more than two hundred million of us, and about one million at the most are interested in conservation and ecology. We just talk to ourselves and we think we represent the whole world. We mismanage because we don't realize that the vast majority of the people--the ghetto people, the farm people--are not interested in "conservation" as we believe it to be. Their whole history of man is taking down wilderness and building farms. We must "manage," not just always oppose the world. That's one of the reasons I got out of the Sierra Club. I felt perfectly useless in the face of what I felt was irrational thinking.

Teiser: Let's stop on "irrational thinking."

Adams: Yes. [Laughing] Next time we'll really go into irrational thinking!

[End Tape 2, Side 1]

[Interview II -- 13 May 1972]

[Begin Tape 2, Side 2]

Photographic Equipment

Teiser: When you took your first photographs, had you seen photographs that you wished you could take pictures like?

Adams: No, no, I don't think so. I have to think. The family had an old Kodak Bullseye, 3 1/4, 3 1/4; I used to take pictures down at the beach. They were just scenes, but there never was anything of consequence. And then I went to Yosemite in 1916, and I had a No. 1 Brownie and took pictures. Then I wanted to take some more pictures, so I got a choice between a pair of two-wheeled skates or a Vest

Adams: Pocket Kodak, and I chose a Vest Pocket Kodak, which was probably a momentous decision. Then I got really interested, and my cousin gave me a 1A Speed Kodak, 2 1/4, 4 1/4. That was when Folmer & Schwing was still part of Kodak. They made this focal plane roll film camera, which was an exceedingly good one. There were several cameras made, but it is still a very superior instrument. I don't know what happened to that; I guess I turned it in.

That gave me a larger image, you know, 2 1/4, 4 1/4, in relation to the Vest Pocket, and then I felt I really ought to do something good size, so I got myself an old four by five Corona view camera--kind of a classic item. It was the cheapest and best camera of its kind then, having back swings and tilts on axis and a rising front. The one I had was in pretty bad condition. It sagged and had to be levelled up for almost every exposure, but I used it for a long time. Then I got for trips a 3 1/4, 4 1/4 (nine by twelve centimeters, actually). It was a Zeiss Mirroflex, which was a very good camera. And then I got a 6 1/2, 8 1/2 view camera. I used plates on that, although I did later have film holders. That's the one I did the early Half Dome picture* with.

I graduated from that to an eight by ten Folmer view camera. Somewhere in there I had a Deardorff that I didn't like and got rid of it, and then I had a five by seven Linhof, early style, and in the early 1930s I got a Zeiss Contax, one of the few 35 mm cameras made at the time--it still remains one of the best designed cameras, although there are others that are equal to it mechanically today. And then I sold the Folmer view camera and got Miss Louise Boyd's Kodak eight by ten camera, which was of aluminum, made on the same pattern as the wooden view camera. Silliest piece of engineering. I still have it, but it's just ridiculous to look at. But it worked beautifully.

And then I thought I really would go "contemporary," so I had several Zeiss Contaxes over the years. And I then got a Sinar, a five by seven camera with four by five reducing back. That was really a pretty good camera, but it's very heavy and it didn't have the tilts in the right place. The tilts are on base instead of on axis. The later system is so much quicker in adjustment. So I finally got rid of that and got the Arca-Swiss, which I use now.

In the meantime I received a camera from Hasselblad, the first camera they made called the 1600, which had a focal plane shutter at 1/1600 of a second maximum speed, which never was over 1/800. They changed that model to a 1/1000 shutter design. Then they developed what they called the 500C with the Compur leaf shutters--a far more dependable system. I've been sort of a consultant to them over the

*See p. 18 and other entries indexed under "Monolith, the Face of Half Dome."

Adams: years. I had almost everything that I could use--I mean, an awful lot of stuff! And then, of course, Polaroid came along, and from the very beginning I've had Polaroid cameras, and have been a consultant to Polaroid. I had great interest in the cameras and materials and in the quality control of films. And then I think it's safe to say that I was rather instrumental in urging the four by five system into production; the system includes the adapter which holds the single film packet which is used with the view camera, and it enlarges the scope of the Polaroid process tremendously. While I'm no engineer, I just kept encouraging things to be developed.

The year before last, the sale was sixteen million just on the four by five system; this four by five back and the film designed for it. Now they have quarter-of-a-million-dollar machines, three of them putting the backs together, and the whole system is going very well. It is getting an enormous amount of use in science, industry, microscopy, and creative work. I've had a pretty general experience with Polaroid! Then just a couple of days ago the new camera--now a whole new system--was announced. I must say it is fantastic!

I forgot to mention some Graflexes; I've had several Graflexes over my life. I have a 3 1/4 by 4 1/4 and two 4 by 5s.

Teiser: Do you still use those?

Adams: Not as much as I'd like, but I often use them with Polaroid. They're fairly valuable instruments.

I forgot to mention that in there after the Mirroflex, and after the Linhof, the first Linhof, I had two Zeiss Juels. I still have them. They're very handsome cameras, but they don't have many adjustments. They're more of a folding camera with a revolving back type.

Then I have also Louise Boyd's aero camera, the five by seven Fairchild camera that she used in her exploration of Greenland, which is a rather extraordinary outfit. She got some very interesting stuff with it. It's big and as heavy as sin, you know.

Teiser: How did you happen to have her camera?

Adams: Oh, we've known her for a long time and she was disposing of her equipment. I sold quite a few things for her--some very elaborate navigation instruments. These things went rather cheap. They were not worth much financially, but now they have historic value. And a set of optical glass filters that are hard to come by now. Grade A glass, about 1/2 inch thick. Absolutely flat plane.

And then, let's see. What would be the next step? Hasselblad. I never owned a Rolleiflex. I've had several enlargers. Also the Polaroid MP-3 camera, an industrial camera.

Teiser: What use do you make of that?

Adams: Well, that's really a copy camera. It's on a stand, with lights, for copying other pictures or documents, or objects in the round. And you can use half-tone screens and get screened images on Type 61, all ready to go for lithography, having an offset plate go to 200-line screen.

I have the usual bunch of tripods and accessories, finders and lens shades and all that stuff--filters, exposure meters, etc. You'd be surprised what you can collect in a lifetime of photography. My studio looks like a flea market. And, the trouble is few items have any real value, but you hate to give them up. I've got filters that don't fit any camera, but I just hate to let them go. They're perfectly good filters.

Teiser: How much strobe equipment have you collected?

Adams: I've done very little with artificial light. I've a ColorTran set, I've a Graflex Strobflash IV, and I've used it, but I just don't like artificial light. Now these are the things that I should get rid of, but if you do that suddenly comes some situation where you need them.

Like last year, I photographed something and couldn't do it outside, so I had to use my ColorTran (that's the new halogen lamps).

And I had my cars, with the big platform I transferred from car to car, and I gave it to my former assistant as a wedding present to put on her big car.

Photography and Technology

Teiser: After you started making pictures with those first cameras, I assume the progression was in both your own skill and improved equipment.

Adams: At the very beginning you're just taking images at the diary level, and I don't think you think at all about it. You see something there and you want to make a picture of it. Now just the preservation of what you see is one thing, but the excitement of making a picture at the lowest level of technique is still an important factor.

The majority of people just work on that basis, and a lot of cameras are designed to be foolproof so anybody can get a reasonably bad picture. A lot of these cameras are automatic and you have no controls. Polaroid has been very generous in that way of thinking and has produced these automatic cameras with "lighter" and "darker" controls. You do have some selection of exposure value.

Teiser: Do you remember at all your first consciousness of cause and effect, of the whole span of the system that you're so very technical about now?

Adams: I think about my picture of Half Dome, made I think about 1923 or '26.* I got deeply interested after that and concentrated on visualization and technique. The techniques don't do you any good at all, unless you first visualize your picture. It isn't just exposure and development, looking at a meter and thinking, "I give so much exposure," etc. You have to "see" the image and must have enough technique to know what you're doing. A man called me up today from, I think, Ohio, and he wanted to know how to make a pinhole camera.

Teiser: [Laughter] He had to phone you for that?

Adams: Oh yes, and of course it was perfectly obvious from the beginning he didn't know the first thing about photography. He wanted to do color, eleven by fourteen color. Well, you have to tell him that when you use eleven by fourteen color with a pinhole camera, that's a problem! His exposure time would be something like two hours, and the reciprocity effect of the film would be so distorted, as well as the exposure values increased, that it would probably end up with a six-hour exposure with filters--even more than that--and results couldn't be guaranteed. Well, he hadn't thought of that, you know, and he had the funniest ideas about the kind of depth of field you'd get with a pinhole. If you knew the first thing about optics, you'd know that you don't get any depth of field, you get a transmission of pencils of light, from all parts of the subject through the pinhole, and it's a perfectly beautiful "correct" image, but of course it has chromatic aberration. As you extend your bellows, you see, your image gets bigger and bigger and bigger, and your exposure gets longer and longer and longer and longer.

So we had about fifteen minutes of talk on that. It was his nickel, but it was interesting to me to find out how little some people know about photography. He said, "How do you know what exposure to give?" I said, "Well, you have a sixty-fourth of an inch pinhole, and you have a ten-inch focus extension of the camera, and there you have f/640." "That small?" "I'm sorry, that's the two times two equals four principle." [Laughter] You see, here he was going ahead with his project and he couldn't find any data anywhere so he calls me up. I'm not an encyclopedia, and there's many things about pinhole photographs I don't understand, such things as diffraction and vignetting. But you see, you have to think of optical and chemical techniques. It's useful to understand complexity up to a certain point, and then it does the job that's needed in photography in the ordinary sense. It's like an iceberg--only one quarter above, and that's all a photographer really has to know. But the scientist has to know the three-quarters below in order to

*"Monolith, the Face of Half Dome."

Adams: design lenses and make emulsions and papers and evaluate scientific results. But we don't have to go that far. I don't have to know the basic theory of the latent image. I console myself by saying, "Nobody really knows much about it anyway!" but you should see some of the purely technical works on such subjects!

Teiser: Were you reading technical papers all of the time?

Adams: I couldn't say I was reading truly technical papers. I was reading books and papers on practical technique, and that's a distinction. Of course in my early period, 1920s and '30s, very few knew what they were doing. There were all kinds of contradictions and myths and hocus-pocus going on. They were doing some of the funniest things in photography you can imagine. And then the bad thing about photography literature is that errors have been perpetuated. I've been guilty of that myself, just assuming that because I see in somebody's book that I'm pretty sure is an authority, that a certain developer works a certain way, I repeat that, and then I'm called to account by an advanced technologist who says, "I'm sorry, but your statements are passé." Photography is complex and you cannot sometimes define the separate actions of materials and processes. For example, the temperature coefficient of Metol and Hydroquinone in combination is not the same when they're singly used. And so I have to correct that in the next edition of my book,* you see. So that's the way it goes. Actual technical papers are something entirely different; they relate to basic scientific investigation, and 95 percent of that is beyond me. And I have no need for it.

Teiser: Adolph Gasser said that your technical knowledge was quite profound and that you often lost him, but of course he's not precisely that kind of technical man either.

Adams: Oh, no. He's a very fine mechanic, but he's not a photographer.

I was at a scientific meeting, and a man from Kodak laboratories said, "In spite of all the complex papers, your books, The Negative and The Print,** give the only completely clear expression of the process that there is." I said, "Well, there must be--" and he said, "No, there's just a lot of things that you're told to do but nobody's ever said why it works or how it works or what you can do to control it." I said, "Well, my work just touches the surface of technology." "Yes," he said, "but you test it far enough." You have to make tests and trials of materials in terms of practical photography. If you went any further than that, you'd be confusing the general photographer.

*In the Basic Photo book series. See below and index.

**In the Basic Photo series.

- Teiser: How did you ever happen to make the decision (if it was your decision) to devote so much of your time to writing that technical series? It must have taken time away from your photography.
- Adams: I guess it did. Looking back at it, I did far too much of it. It's a matter of getting mixed up with galleries and museums, photographic politics, you know, all those kinds of things. It does take time and energy, but you seem to have an awful lot of it when you're younger. I think any professional has an obligation to continue and support his profession. You take doctors, for instance. A good doctor has to do a lot of study as well as teaching and convention work, writing, and reporting. Scientists' reputations really depend pretty much on what they publish. Some scientists have got three or four hundred papers to their credit. Dr. Land and the late Meröe Morse, his famous chief assistant, got a coveted prize for the best article on photo technology. I can only understand one-tenth of it! But these things contribute hugely to the medium.

Innovations and Patents

- Adams: The difficulty in industry is that pure science can be written about whenever the nature of science is being directed to a project. But then it becomes immediately very secret until the patents are obtained. And then production methods remain very confidential. You have to be a constant watchdog because once you allow a patent to be breached in any way you're out of luck.
- Teiser: Eastman does the same thing as Polaroid?
- Adams: Yes, they undoubtedly do the same thing. They have a tremendous laboratory, and they do a great deal of basic science. The problem is they don't have much imagination. Polaroid's labs work on a very different basis. They know they have to make money, and they always have done extremely well, but the company as a whole doesn't approach these programs only on finance. They approach them on creativity. Now Land had no reason to present this camera to scientific and technical groups other than that he wanted the community of scientists to know what was going on. Eastman might not do a thing like that. They'd present it to their own salesmen and dealers. But to really go into depth the way Land did, for a scientific group, which means not holding anything back, is remarkable. He has of course given many professional demonstrations of various aspects of the Polaroid process.
- Teiser: Will the new SX-70 camera have implications for designs of other single-lens reflex cameras?

- Adams: I don't know. I think it's Polaroid's concept for quite a time to come.
- Teiser: The SX-70 camera is for color only?
- Adams: So far. They may have black and white some day.
- Teiser: No reason there shouldn't be, is there?
- Adams: No, I suppose theoretically you could say if you can do it in color you can do it in black and white, but there's nothing sure about that.

Innovations and Aesthetic Demands

- Teiser: Is there any work being done in any systems not making use of silver?
- Adams: Oh, the laboratories are spending fortunes on it. I don't know. I just assume this. It's a very interesting thing: way back in the 1830s they found out that silver halide is light sensitive and they've found nothing since then that equals it! We have what they call Diazo; that's a dye image, pretty complicated and not permanent and rather bad color. Very bad even in black and white because it has to be a condensed color image. Then of course Xerox is electrostatic image, which is very important. Again it's very slow and it has a limited range.

This Polaroid print of a marble head and leaf is practically what we call a "straight-line image." You can't make a print like that on ordinary paper. I haven't been able to make a print to come anywhere near it in quality. Now just why that is, is psychologically hard to define.

I think there's a response, an instinctive response to creative patterns. The highly gifted artist has that to a much greater extent than others. It has either been developed or hasn't been. Perhaps it is a truly instinctive quality.

Making Photographs and Printing Negatives

- Adams: I'm sure if you heard some music coming out of the phonograph that was Wagner you'd immediately recognize it, and yet you might play Strauss or Beethoven and get the same sounds, but that isn't it, you

Adams: see. The same orchestra, the same instruments, but something else "happens." That whole thing applies to photography in the sense of values. The difference between a fine print and an ordinary print is terribly hard to define; in fact you can't, in a physical sense. It is a profound composite experience; putting everything together and instinctively meeting internal demands.

So I think it would be hard to say just when did the casual interest in making pictures with emphasis on subject change into an awareness of the image as a thing in itself? You think of photography as an analytic art. The optical image of the world is very precise, so you've got to get the camera in a position where you get the maximum formal arrangements that you want. Then you make all kinds of tonal and spatial separations. That's one of the things that you learn very quickly. Like I told you yesterday, you're sitting here, and it doesn't bother me when I'm talking to you that the window cord comes out of your left ear or right ear [laughter]. I move around and control the relationship in space and time. But if I have the lens here, the picture shows a curtain cord coming out of your right ear, a highly unpleasant thing. This suggests the idea of following lines without mergers or confusions. And then, what is the value of the skin? I can measure the light reflected from your face. Probably fifty c/ft² (candles per square foot) on one side, and fifteen c/ft² on the other, but what does it feel like in terms of the print? If you know the zone system, you know where you place your values on the exposure scale of the negative, and that automatically tells you how to expose and develop.

And then I think it is very important as a reference idea would be to compare the negative to the composer's score and the print to the performance. It doesn't mean what you call the photometric equivalent. If you're getting a negative that has the same proportion of values as the negative, you'd be going through the photometric equivalent sequence. That might have value in science, but it would not have value as an expressive picture. In fact it might be extremely unpleasant.

Teiser: Different performers have performed Bach, say, differently, so there are variations in performance. Can you conceive of taking one of your negatives--say that you made many years ago--and printing it now in quite a different way than you did?

Adams: I do, I do. But it's not so different that it changes the basic character. I might print it harder, or I might print it softer, I might print it bigger, I can't really do anything fundamentally different with it. I can't change the subject of it, but I can change the interpretation. I was going through a lot of old pictures just the other day, and I couldn't understand how I could have printed them that way. They just looked tired. They had a small

- Adams: density scale (the reflection density scale). So if I took the negative and printed it so extremely different that there'd be a really different image, that might be questionable. Maybe it wouldn't be.
- Teiser: In this, you're both the composer and the performer yourself.
- Adams: But I still would play differently, subtly differently within the limit.
- Teiser: You have printed negatives of, I think, Brady--
- Adams: [Matthew B.] Brady and [Ben] Wittick and [Arnold] Genthe.
- Teiser: Have you attempted to print as nearly as you could the way the photographer printed it?
- Adams: In the Genthe pictures I vastly improved it. Genthe used a terrible paper, a thing they call Opal, had kind of a bad green tone and dull surface. So most of his pictures are very romantic, have the turn-of-the-century feeling, but never showed all the negative contained. So I made the print, it was of the San Francisco before the fire. I made it my way, and I took it down, was scared to death to show it, and he loved it. I was afraid he might say, "Well, I don't like it that brilliant." Then I made Genthe's "The Street of the Gamblers," a fantastic thing, done in 1904 with an old Kodak, roll film. Beautiful "anticipation." You could possibly pass it off as Arnold Genthe or W. Eugene Smith or Henri Cartier-Bresson by the style. But all his prints were sort of brownish green, soft, and "goofy." As for using glossy prints--that was in earlier days only for newspaper reproduction, etc. An "art" photographer was ashamed to make a glossy print, you know. Now we do the opposite thing. We want as much brilliance as possible!

The Brady photographs, the photographs of the Brady group, were informational pictures, and they were done on wet plates, and of course, as they used the printing-out process, such were extremely contrasty. The printing-out process is where you put a piece of sensitive paper back of the film and expose it in strong light, and the effect of the light reduces the silver halide in the print paper to silver. You can see the picture building up. The printing frames have little back trap doors you can open and see the progress of printing. Now, as the silver builds up it acts as a shield for further exposure. It is self-masking. As you get to the maximum black, it takes a longer, and longer, and longer time, and in the meantime your gray and white values come through, and you print until you've got just the detail you want in all the values. As you print more than required you get gray results. But a modern normal negative printed that way would be so soft you would get very weak

- Adams: prints. And so these wet plate negatives of very high density and contrast, to print them I had to use A20 Number 0, the softest grade of A20, and an extremely soft developer. I did get some prints that were very close--simulated the originals--but any normal treatment given would result in far too contrasty prints.
- Teiser: Eastman wouldn't make you a special emulsion for this sort of thing?
- Adams: Well, they could. It would probably cost five or ten thousand dollars.
- Teiser: I see. [Laughter]
- Adams: It's got to the point now where with certain items you have to order a minimum of three or four hundred dollars' worth. For instance, if I want to use a roll of paper and make a big print the size of this door on No. 4 Kodabromide double weight glossy, I have to order about three hundred dollars' worth. They don't stock it. They stock the G surface and they stock something else. They have the paper, and out of their huge rolls they'll cut you three hundred dollars' worth. But they won't make up rolls in boxes and send them out in the country for sale, because it has a relatively short shelf life and not much if sold. If you keep it cool it's good for around two years, and I've used paper ten years old by putting potassium bromide in the developer to reduce the fog, providing it hasn't been subjected to dampness.
- Teiser: Who was the third photographer whose photographs you said you--
- Adams: Ben Wittick. And then Bill Webb lives down here near us who's doing a second book on [Adam Clark] Vroman, the excellent photographer of the Southwest. He's having an awful time printing, because the negatives are not normal negatives, but he's got a fine technique--he can manage them. But you can't do exactly what they did unless you use a printing-out paper. And you can't buy any good printing-out paper today.

[End Tape 2, Side 2]

[Begin Tape 3, Side 1]

Photographs as Commodities

- Teiser: I don't know Ben Wittick. When was he?
- Adams: Oh, in the seventies, eighties, nineties. Late nineteenth century, let's say.
- Teiser: Where did he photograph?

Adams: Southwest generally, to the best of my knowledge.

You see, many of the Brady group, when the Civil War was over, went west to photograph. [Timothy H.] O'Sullivan, [William Henry] Jackson, I think [F.H.] Bell; several others did, went into professional or survey work. Of course they were all relatively young men then, and a lot of them didn't keep up photography.

You see, Brady didn't make photographs himself. He was a promoter and a businessman. He would contract with the photographers for their services. Beaumont Newhall and I went through about five thousand Brady negatives in the [National] Archives (a big set had just been presented them), and every negative envelope had the name of the photographer on it. But, you see, the photographer was seldom, if ever, given credit for all his photographs. But Matthew Brady, Incorporated, studios was given the credit. Now when [Roy E.] Stryker took over the photographic group at the time of the dust bowl--that's the Farm Resettlement project history--he got his group of superb photographers together, but they always got the credit. That was the difference; the photographers got the credit. F.S.A. [Farm Security Administration],* Dorothea Lange photographed for it. They always gave full credit.

Now, we don't think that Brady intended to omit such credits, but photography was nothing but a business at that time. And if you did a story, you wouldn't give credit to every item that went out. If you go to a machine shop and have a device made, it would be made by the Blank Machine Company, and they don't name Joe Doaks, etc., who perhaps did the actual work. So it's a psychological approach. Photography didn't mean anything in terms of creative art. The men even exchanged negatives. O'Sullivan would bemoan the fact that he didn't have something of the Southern Colorado plateau, for example, but Jackson had, so he'd trade him one for something else.

So, photography was a kind of commodity. They only became conscious of it as a personal and expressive art at a much later date. Excepting a few people (very few)--Stieglitz, Cameron, [Paul] Strand--those people maintained the integrity of the artist. I think Vroman was probably okay. He realized what he'd done. But then on the other hand, it was a kind of exploitation to allow the Union Pacific to use his photographs and hand-color them. God-awful calendars and posters and timetables that were hand-colored reproductions ad nauseam! I don't know how far I'm going afield--

Teiser: No, no. It's all within the--

*Stryker headed the photographic unit of the historical section of the Division of Information of the Resettlement Administration, which in 1937 became the Farm Security Administration.

Photography and Politics

Adams: So then we had the Photo League in New York, which formed before the war [World War II] primarily as a cinema group. After the war it was re-formed as a still group. It was taken over by the Commies and was put on the "red list." Many of the best photographers were unwittingly trapped in that. I was tipped off. I was down here, and they called me up and said, "This board is now in control of the Commies and you better do something about it." So I called my lawyer and he said, "Write them a letter and ask them: Are you becoming politically inclined or aren't you? I joined as simply a photographer." And he said, "Send a copy to the F.B.I." I didn't get any answer, so I sent them a resignation. I said, "I joined this for photographic purposes, not for political or ideological reasons. I don't want to be associated with Republican, Democrat, Commie or anything. I mean it's bad business to get all wrapped up in the political thing." I sent that to the F.B.I. too, and the letters got me clearance quite fast when I needed it most, because I had disclaimed any political association. But other young people paid no attention to it at all. One of them had a job with the government overseas and got all the way over to London before he was investigated and sent home.

That was mostly in the awful McCarthy period, so even if you had only read a chapter of Marx, you were a subversive. Of course, as an American that makes you very mad. But the thing I resented was not any fear for myself from the thing, because I knew what I believed in, but being automatically included in the propaganda business. My best rejoinder is now if you want me to join things--if somebody calls up very impassioned and says, "You must write a letter to the government," I say, "I'm just not a push-button liberal." A lot of people say, "Oh, sure, I'll come right out with an idea that's in favor of anything a Democrat would say, and any Republican is bad," and so on. (And vice versa, I can assure you.) But it's fairly hard sometimes to be really logical, retain a logical opinion, and so I just have that phrase to fall back upon, "I'm not interested in being a push-button liberal."

Group f/64

Teiser: Back to an earlier organization that you were part of and then disbanded--

Adams: Oh, the f/64 Group, yes?

Teiser: Do you remember how that started?

Adams: Yes. For several years after 1930, two years anyway, I had been talking to my friends about getting a group together and profess-- watch that cat so it doesn't get out!--you know, make sort of a manifesto on straight photography, because the camera club people were pretty dismal; [William] Mortensen down south [in Southern California] was a prime example. Oh, there was some terrible stuff.

So Willard Van Dyke and a few others said, "It's a good idea; what'll we call it?" It was Willard who came up with "f/64." That means a small stop, a very small stop on the lens--which [makes for] clarity and depth, the kind of image qualities typical of Edward Weston's work and our work. We don't enjoy any fuzzy imagery anywhere.

We had this group formed, with Edward Weston, Sonia Noskowiak, John Paul Edwards, Alma Lavenson, Willard Van Dyke, Imogen Cunningham, Henry Swift, and myself. We had several very interesting shows, and supported a kind of manifesto (you know, like the Dadaists); we protested against the conventional misuse of the medium. Here was this beautiful medium of photography which was being bastardized by soft-focus lenses and paper negatives and all of the things that they used to make the lens image look unlike a photograph. And then after a year or so, we decided that we'd done all we could, and we'd just repeat ourselves; it would become a cult, and Weston didn't want to be in a cult, so we decided we'd simply disband. However, it did create a cult, and the cult is still with us! . Everybody apparently creates a cult. Edward Weston had a cult, and I guess I've got one; people are imitating me. But Group f/64 did have a profound influence on making people realize that the straight photographic image could be beautiful, and not the pictorial doctored one.

Teiser: Maybe this is the place to correct a thing that's in print. The Gernsheim A Concise History of Photography says that Willard Van Dyke started the f/64 Group.

Adams: Well, I would say Willard Van Dyke was instrumental, certainly a leader. I would say (this is not boasting) I had proposed such a group for two years. Willard Van Dyke activated it--said, "Well, let's do it," you see, and proposed the name. That's half right, at least. I don't think it makes much difference so long as the other people are mentioned.

Teiser: The others were all established by that time?

Adams: Some were amateurs and some were professionals. Imogen Cunningham was a professional; Alma Lavenson was semi-professional; Noskowiak was professional; I was a professional; Van Dyke was quasi-professional--he was really interested in film but running a gas

Adams: station to make a living, and also doing black and white photographs. And, of course, Edward Weston was a creative-professional. Then there was Henry Swift, the businessman, but of rare creative ability, and John Paul Edwards, who was a former pictorialist, a businessman.

Teiser: How did you happen to let him in?

Adams: He was good.

Teiser: He was within the scope?

Adams: He was within the pattern. He was very supportive of the thing and was doing very good photographs.

Teiser: Did you discuss "painterly" photographs?

Adams: Painterly? Oh, well, I guess that was what we were fighting. We were fighting the idea of photographs imitating the feeling or the looks, the appearance of other media. The straight photograph was sneered at. There was no possibility of it being art, so earlier photographers were always trying to add something to simulate art. That was done with paper negatives, and texture screens, and rough papers, and bromoils and gum prints--everything imaginable! You just look through Caffin's history--I'll loan it to you. Have you seen it yet, the one the Friends of Photography gave to the members? Caffin's Photography As an Art?* I'm going to give you that book, because that will show you much. This was at this difficult turn of the century, when Stieglitz was trying to get away from the domination of the Manhattan Camera Club, and a lot of these people such as Gertrude Käsebier as well--can't think of them all. Out here Ann Brigman did nudes and junipers at Lake Tahoe--all soft focus. But they were very definite attempts to be creative, much more so than the ordinary pictorialists, who were just being literary or descriptive or making a fetish of being not sharp.** I've had people say to me, "Now, if you only would give that a little soft focus, do something to improve it--it's so brutally hard now." And I made all kinds of soft-focus pictures on rough Dassonville or Wellington papers, and I did some bromoils. I've got a bromoil over there, where the image is recreated in ink--beautiful permanent image, carbon black. But not sharp!

[End Tape 3, Side 1]

*Charles H. Caffin's book, originally published in 1901, was re-published in 1971 by Morgan & Morgan for the Friends of Photography, Carmel.

**For more recollections of Group f/64, see mentions as indexed.

[Interview III -- 14 May 1972]

[Begin Tape 3, Side 2]

Teiser: Yesterday we were talking about the Caffin book--

Adams: Yes. The idea of the division of photography between the "artistic" and the straight record, which was just discussed--semantics always seems to intrude on common sense in photography--but a documentary record would imply an image in which there was nothing conveyed but merely a factual record. You'd have a competent image; you may be getting as much as possible in it, but none of it might carry any conviction. Most of the very early photographs (many of those of today) were very dull pictures of things. A few outstanding people did much better. But the straight, detailed photograph--a sharp, simple print, of course, was not considered artistic. So, the so-called "artistic minded" photographers just attempted to imitate painting. And there's a very hazy line between the pictorialist, who is not intense, is more or less an imitator, and the person who was trying to think of photography in the "feeling" of the time, but being very sensitive to composition and arrangement, and seeing. Although many of their prints do not look like our sharp prints today, there is a very definite camera "seeing" ability, and it takes quite a lot of study to really confirm that.

This Caffin book, for instance, has some of it, I think. Of course, some of the work is very dull, and some of it is, in a sense, manipulated, but it is a break from painting, although they used a lot of fancy borders and toned prints and so on. The student of photography can observe that they weren't "seeing" the world as the painter might see it; they were beginning to see it as photographers.

Stieglitz

- Adams: In the next ten to twenty years, Stieglitz represents the transition from almost imitative work, imitating the spirit and the appearance of other media, into the spirit and reasonable impression of the photographic image.
- Teiser: There are two Stieglitz photographs in the Caffin book, on page 30 and page 36, that we wondered if you'd comment upon.
- Adams: The greatest body of Stieglitz's work, I guess, was done in the eighties and nineties. You said 30 and 36? Both these were strictly

Adams: photographs, pure photographs, in existing light. They're night pictures. Their effect is from what we call "existing light." In other words, the light in this room is existing. The light outside is existing. Even if I turn on the lights in the house, that's existing light. The instant I come in with a lamp and direct the lamp on the subject, we say that's "imposed lighting," really artificial lighting in the sense of supplying or contriving illumination. Now there's a point between those two where you add light to either simulate or enhance the existing light. And if you were doing this picture, say, for television and you wanted to get the spirit of this house, you wouldn't have enough light, so in some way you would have to direct a diffuse built-up illumination so that the feeling approached a simulation of reality. But the chances are they'd just come in and put a big light over there, a big light over here, and it would be absolutely false--to the character of the place or its illumination.

Teiser: Stieglitz's icy night picture, the earlier one, if you looked at it quickly I suppose you'd say it was soft focus, but perhaps it's the atmosphere. The other seems sharp.

Adams: Well, no, Stieglitz might have used soft focus. I don't know what he did; I mean, he did everything sooner or later. But there were lenses that were "uncorrected." Well, let's see, Weston used a portrait lens (the name will come to me). Whereas at the larger openings, it was slightly soft focus, when you stop down around 16 and 22, it gets sharp. The Graf Variable Anastigmat it was called. I want to correct that: I think that that was independent of the stop, but the soft-focus effect came by separating the elements. In other words, you didn't get a sharp image.

Now, this does--you're quite right--this looks like a slightly diffused image. It might also be a way of printing it, maybe a platinum print that was on a textured paper. I've seen it, and as I remembered, it was much sharper than the reproduction. But you mustn't mix up sharpness and acuteness. Acuteness is an impression of sharpness, because we have what is called a "micro-density relationship;" that is, value-edges from light to dark are very abrupt. Now, if you have a diffusion effect, there's a curve or slant between the light and dark values instead of an abrupt change. So this photograph looks as if there was low acuteness in the snow-covered branches, but as you look down other places, you find little dark branches that look quite sharp. So you think somewhere there's a flare, or diffusion of light or silver. When you look over here, you think it's much sharper, and it is. But these are reproductions of reproductions, so it's awfully hard to tell.

Teiser: Did Stieglitz ever work in the early, pictorial idiom?

Adams: Oh yes. He did lots of things in these modes.

Teiser: And then did he just suddenly decide that that was not the way to go or--

Adams: Well, let me see now. I'm not enough of an historian to make a correct statement here, but these early works were pretty factual. He went around the Alps, made many photographs of the Alps, and in all of that period, his work was quite sharp, as I remember. Then he went back to America in the 1890s and 1900s and was trying to work at the Manhattan Camera Club, and did some things that really weren't very sharp, and whether he did it intentionally, whether that's what he wanted to do--just keeping up with the Joneses--I don't know. But, nevertheless, he did make quite a break with the Manhattan Club and other groups, and said that photography was art and could not imitate, and then selected works which he felt were not imitations of general work of the time.

Teiser: By the time you knew him, he was established in this?

Adams: Oh, well, he had gone through the whole period of Camera Work, publication, and a great deal of creative work that became sharper and sharper as time went on. Some of his later prints are very sharp. I have a print, "City at Night"--it's on a smooth surface. It's a very beautiful, clear photograph. He didn't care for Weston. Stieglitz had a vastly greater warmth of tone and warmth of feeling. Weston's work was more intellectual, straightforward, black and white.

Teiser: You knew of Stieglitz, of course--he was well-known here on the Coast, I presume--before you went east in 1933.

Adams: No, very little. He was known by reputation here only. He only went as far west as Chicago once. He was a distant relative of the Sigmund Sterns [of San Francisco].

Teiser: Oh, he was? Well,

Adams: Well, it's a complicated thing. He married I believe into the Lehmann family, and Mrs. Stern's sister married a Lehmann[?], Charles Lehmann, so somewhere they were second or third cousins. Charles Lehmann was a brewer--Lehmann breweries, tremendously wealthy and lived in New York. Mrs. Stern knew Stieglitz, and she had bought at least one O'Keeffe,* so she gave me a letter when I went east, a letter of introduction. Weston had a bad time with him; they didn't get along. Stieglitz could be very, very difficult. In fact, kind of ferociously negative at times. But that I think is a separate story, that whole Stieglitz episode. My meeting with him and everything.

Teiser: Would you tell it?

Adams: Most of this material is in The Eloquent Light--

*Painting by Georgia O'Keeffe.

Teiser: Yes.

Adams: But I went there with this letter, and it was an awful day, a rainy April morning in 1933. Stieglitz had just moved into the American Place on Madison Avenue, and he wasn't feeling well and was looking very grim. So he nodded and I gave him my letter, and he opened it. He said, "All this woman has is a lot of money, and if things go on the way they're going now she won't even have that. What do you want?" I was rather mad, really, in a chivalrous sense. I said, "I came up to meet you and show you some of my work." He said, "Well, I can't possibly do it now, but come back this afternoon about two-thirty," and turned his back on me. So I went out in the streets and pounded up and down Madison Avenue in the rain and got madder and madder and madder and wanted to get the first train home. And then I figured, "No, I came all this way to see Stieglitz; I'd better stick it out."

So I was up there at two-thirty, and Stieglitz was sitting on this cot, with a sore tongue--he had some kind of a circulatory trouble, and his tongue would get sore. And he was holding his handkerchief and talking. Finally put the handkerchief away and then, in a most uncomfortable position, looked through my portfolio. There was this one hard cot, and the only thing for me to sit on was the steam radiator. I was getting gradually corrugated and grilled on the steam radiator [laughter], and he looked all through the work--the folios. And every time I tried to say something, he put his hand up for silence. So we went through this thing in dead quiet.

Then he took the portfolio and he closed it all up and tied all three strings, and then he looked at me. And then he opened the portfolio up again, and he went over all the prints again. He really looked at them--slantwise to the light, saw how they were done, mounted, etc. Well, by that time, me and the radiator were not getting along too well and I was pacing around. So finally he tied it up again, and he said, "Well, that's about the finest photography I've seen in a long time. I want to compliment you." It was quite a happy shock, and from that time on we were very good friends. But he sure made it difficult at first.

The first moments were pretty tough, and many other people had a similar experience. It was sort of a testing. If he didn't like you, he didn't like you, and he had nothing to do with you--period. If he did like you, he was fine, but he was irascible.

Teiser: Then he gave you a show.

Adams: Then in 1936 he gave me a show.

Influences

Teiser: Did he influence your work, would you say?

Adams: No. Well, what he did, you see, he affirmed a very high standard, and opened up a very different point of view from any I'd ever known of before. And that point of view was reinforced by his contact with the contemporary arts. He was the one that brought many of the greatest contemporaries to this country. Steichen would meet them and see them in Europe, and then send examples of their work to him. So he gave the first showing to Negro sculpture and Picasso and many others for the first time in America--he was a very important influence in contemporary art.

So the influence was not technical. I mean, I got my great craft boost out of Paul Strand's negatives I saw in New Mexico earlier. Paul Strand is, in a sense, a purer photographer than Stieglitz. I mean, a straighter photographer if you want to use the term. But the Stieglitz influence was a contact and an awareness of a bigger world than I'd ever known, you see. And tying photography in with that, of course, gave it a different stature. So, it was a vital new experience. Both Stieglitz and Strand did have a profound effect on my work. It would be hard to describe.

Now, I knew Weston very well; we were very close friends, and had mutual affectionate regard. But his work never moved me, never stirred me to do anything different. Just reaffirmed clarity. In fact I was bothered by the emphasis on shape and form. I mean I thought he was extracting sort of voluptuous effects--shapes--out of things and gave them sexy undertones or overtones. He disclaimed that most of the time. People read into it what they will. Peppers looked like nudes, etc. And that bothered me because I thought it was an imposition of something on the object. I didn't feel it necessary to go that far. I think Strand felt the same way. And I think Strand had the greatest influence on me--

Teiser: You met him in New Mexico in 1930?

Adams: Yes.

Teiser: What was he like, personally?

Adams? Strand? Oh, he's eighty-three now, and he's--he's a little aloof, a little dour, moves and thinks rather slowly. I mean, he's very deliberate, and he's a very fine artist, and--a very kind and understanding person, indeed. [Interruption for telephone conversation]

- Teiser: When you first met him was he well launched on his career? Was he well known?
- Adams: Oh yes. He had his first show when he was sixteen or seventeen. And he'd experimented with movies. He had very strong leftist political orientations. In fact that's why he moved to France. Couldn't get along with our particular system, although he'd inherited quite a lot of money and seemed to take advantage of the system, as so many people do. But he was at the Photo League and stood up for them during this distressing political probe and was very definitely on the "list." It was an awful thing.*
- Teiser: But was he personally encouraging to you?
- Adams: Yes, yes. He didn't see many of my things until much later. But he was very reserved. Yet when my show of Manzanar Relocation Camp and the people--the Japanese-Americans--was at the Museum of Modern Art, he was quite visibly moved, wiping his eyes, though he wasn't saying anything. Now whether that was because of the social implications, the photography, or the combination, I don't know.
- V. Adams: I'm going down to Point Lobos.
- Adams: Look out for that road there; it's very dangerous. [To Teiser] Excuse me.
- Teiser: I think in Mrs. Newhall's The Eloquent Light she says you saw at first just his negatives and admired them.
- Adams: Yes. You see, if you're a photographer, your negatives sometimes are more important to the student than prints. Now, I won't say that for an individual picture. I mean, you might not visualize the real print, but when you see a series of negatives and they all have this clarity and this organization, you may become very moved. And you realize how they could be ruined by bad printing. Anybody who could make negatives like those was a superior photographer. I wouldn't be able to tell just how he would print them. But I know that the negative has the inherent great qualities. I think sometimes with the negative you're more conscious of the design and organization than you are with the print because you don't have the subjects in positive form dominating you.
- Teiser: I suppose when I ask you about influences, I'm asking for oversimplification. I mean, I'm sure you were going your own way.

*See p. 49.

Adams: I don't think influences are always very obvious. I think that you never know what's going to influence you, and I've seen some students' work that influenced me very much. I mean the student has seen the thing in a new way, and I remember that whether I consciously use it or not. But, I certainly was negatively affected by Mr. Mortensen, by the pictorialists. I never was excited about Clarence White, but lately I'm beginning to feel much better about him.

Teiser: Why?

Adams: Well, he had a very fine sense of composition but the prints were, with a few exceptions, a bit soft and vague for my taste.

I think that's what bothered me. I was kind of a purist, and I was feeling that a lot of these photographers saw things very well and, like some workers in the Photo League, just made bad prints. And you learn later that the fine print, per se, is something which may not convey the idea. Maybe you want a hard, brutal grainy print, like the work of Lisette Model; it's phenomenal in its way. The most brutal black and white prints you've ever seen, and in absolute resonance with her way of seeing her subjects. So I think it would be very narrow to say she's not a great photographer because her prints don't look like Weston's or mine. You know, it would be silly--it would be impossible. I think if I were to take a Lisette Model negative and make a rich-toned print and beautifully mounted, it would be very apparent something was phony.

I think that in the professional sense [Anton] Bruehl strongly influenced me, and Paul Outerbridge, Ira Martin, and the Morgans (the Willard Morgan family), of course, for many years. But I really can't describe, for a student to figure out, where the influences are because, as I say, I'd go on trips with Edward and I'd see all his work and prints, and we were the closest of friends and had great admiration, but nothing really important happened to me with him. I didn't change my opinion or approach at all.

Taste, Perspective, and Distortion

Teiser: In discussing photography with people whose photographs you don't necessarily admire tremendously, do ideas come to you in an interchange of opinion?

Adams: Oh sure. Ideas come. Sometimes I have occasions to be very critical because of unnecessary sloppiness. The thing that bothers me more than anything else is weakness. I don't mean what fascists would say was weak, but just no body, namby-pamby. You know, many

Adams: musicians just play, and so what? Well, many of the photographs you see are just so what? The way the photographers see, the way they print, the way they present the prints, the way they handle them. When I see a kid come up with a portfolio and he has a nice print protected by a slipsheet, the chances are that the work is good. It may not be; it may be a great shock; you might find some awful, tasteless things. I always say, there's nothing worse than a clear, sharp image of a fuzzy concept. [Laughter] You get a terrible concept--it might be physically sharp, but it's just empty or in bad taste.

Then of course you say that and somebody asks back, "Well, how can we define taste? Can you really say that you can define what is good taste?"

Teiser: [Laughs] Can you?

Adams: Well, you can. Now, if you say, "I refer you to art standards," you're saying you relate tastes in photography to tastes in painting, and you've been saying that there shouldn't be that influence.

Teiser: It's too bad that photography wasn't invented first.

Adams: Well, of course the camera obscura was used for a long time, and we don't know how many (I suppose it is known somewhere) old paintings were influenced by this optical image. One of the important things to me is that one of the first daguerreotypes in 1839, that one of the boulevards in Paris, shows that the lens is a beautiful instrument. It has no distortion and shows perfect definition over the entire field. Now, why would they need a lens like that before there was photography? And Beaumont Newhall said, "They used to draw and project architecture on the screen. The camera obscura would reveal the image, and then they would draw lines upon it." They did have accurate lenses.

Teiser: Didn't landscape painters have a little gadget they carried?

Adams: The Claude Lorrain glass, a reflective device that enhanced color relationships. I really don't know what it did. We use a viewing filter today which changes the colors, or rather neutralizes colors--makes what you see look more like what the panchromatic plate sees without a filter. But the Claude Lorrain glass was both a transmission and a reflecting glass, I think. It would reflect and see simplicities; a lot of detail would be gone. They'd just see mass and body, and they'd get their composition quicker. But that was for a certain type of painter. You see, Giotto did not have perspective. Everything was flat, you remember, and perspective was sometimes implied by a change of scale, but the idea of drawing converging lines was a later development.

Teiser: But in photography you can't escape it.

Adams: You can't, no. Perspective is a function of distance of lens, and if I have a 20-inch lens on a camera right here, that door is going to be very big and the angle is very small. If I put on a 5-inch lens, the angle is going to be larger, but the perspective will be the same. Of course, in the large-image picture I don't get the impression of a deep perspective because I don't see many converging lines. I only see the lines that converge towards the center of the subject. So long-distance pictures, made with long lenses, always look fairly flat. Telephoto images are fairly two-dimensional.

We only see about a degree when we look at something. We have peripheral vision of about--what is it? Forty degrees? Depends on the individual. But when I'm looking at that door, I can see you and I can see this window. I'm only seeing the door sharp, and I'm seeing recognizable objects as far over as the lamp there, because what I'm doing is moving my eyes and head. So I have the illusion of always observing a sharp image.

In one way the eye is a very poor instrument optically, because it has a very small field of sharp definition. But it is also an extremely sensitive psychological instrument. It will pick up something here and interpret it, though you might not see it "clearly." I can't recognize you when I look in there. I know there's two people there, but you can make the slightest motion and it will be recorded, and I would look at you. And then I would establish by that the reality of you and the door. And I would put the lens here, and I'd get you and the door, and a strange thing happens: the element of scale comes in, because I have a direct comparison between your head and the door. Now, when I'm looking at you I only have your head, and when I look at the door I have the door or part of it. And I adjust immediately.

When you take the photograph, that's where your scale comes in, and the longer focal length lens the more accurate the relative scale becomes. In other words, you take a very distant picture of a peak, and there's a pine tree. Well, the pine tree and the peak--you can compare them. If you knew how big the pine tree was, you'd know how big the peak would be. When you come up nearer with a short focal length lens, you have near-far, the domination of the near subject, so it's entirely out of scale. That's one of the magical things that can happen in photography, where you get exaggeration of the scale and feeling of depth.

We were just looking through the things I did in the Boston Museum of Egyptian sculpture. This huge seated figure in the room, and back of it, down the hall are little busts. Well, due to the camera we were using and the film, I couldn't stop the lens down, so

Adams: the head's not diamond sharp, but still the figure was absolutely enormous because of the reference to the optical size of the busts in the distance. Now, if I can move down through the museum and out across the street and photograph the same scene with a 30-inch or a 40-inch lens in the same camera, then the scale would be almost relative, and the busts would assume their true relative size.

Teiser: To continue that comparison with painting--this means that the photographer is trapped by his lenses?

Adams: He's trapped by optical considerations. If he uses the single negative and doesn't make combination pictures, he is trapped by his lens and the camera. The key is his focal length of lenses; he has different lenses, and he has adjustments on the camera to compensate for focus and correcting for convergence within a small range. The basic thing in photography--when you take your ideal position, you first set your camera level. Of course, all this is intuitive. You're out with a tripod and you just do that automatically before you do anything else. And then you start moving around. But if you just put it down carelessly and then you get a picture of, say, the ocean with a tilting horizon--it simply shows that you have not thought of your image.

You have the geometrical accuracy to contend with, especially with photography of architecture. If a building is plumb vertical, then the camera back must be parallel to it, and if not you get a convergence, one way or the other. The same takes place in the eye, but of course, here again we have the psychological controls--the eye "corrects." If I were doing a picture of some architecture, say of this room, and I was using my four by five view camera, I would first get my camera back absolutely level if I wanted to have all of these vertical and horizontal lines true and level. Then the lens image normally would be cut off at the top, so I'd use the rising front, lifting up the lens (hope the lens has coverage) to include more of the room height. If this is not sufficient, I must tilt the camera up, and then bring the back to parallel position. Then I would tilt the lens to correct the focus, and if I focus on something very close, I might have to tilt the lens further forward. I can tilt the lens without changing the "geometry" of the image. But the instant I tilt the back I'm changing the geometry, although I can use the back with nonlinear subjects to correct the near-far focus. If there aren't any straight lines, you are not aware of convergence.

Teiser: It makes painting seem easy by comparison.

Adams: Well, I don't think it is. Of course in painting you can place elements as you want. The thing is you're free, and you get myriads of impressions over time, and then you organize them in a creative fashion. But painting is a synthetic medium in that sense, and photography is analytic. Some people use multiple negatives, double

Adams: printing, and a lot of contemporary work employs solarization and other special techniques. But you still have the optical image as the base. There's nothing that you can do about that.

Of course, you can distort if you want. Some people will distort in the enlarger. But the word "distort" is a negative term. I mean sometimes we use tilts in the enlarger to correct for distortion in the negative that we couldn't correct in the camera. If we have a slight convergence we can tilt our base board in the enlarger and correct that convergence. But if we over-retouch or manipulate the negative, the dividing line between good taste and bad may be quite apparent. But again, who can really define good taste?

Teiser: Well, when you look at the photographs of a man like Weegee*--

Adams: Well, Weegee was a great clown. Weegee was an extraordinary person. He really was a clown, and his aesthetic sense as we think of aesthetics was practically zero. He had an uncanny news sense. He had second-sight, premonition. He'd actually be at a place waiting for an accident to happen, and it would! Fantastic. And then later on he started using these distorting devices, and it all ended up being I don't think of any importance whatsoever. His really great pictures are the news pictures he had of tragic events. The fire in Harlem is one, and the one of the two dowagers leaving or going to the opera is one of the great satirical photographs.

Teiser: That's distortion of one kind.

The Photogram

Teiser: Did Moholy-Nagy use distortion, or did he--?

Adams: I don't know. He might have used devices, but to my knowledge he didn't. In addition to his camera he worked with what is known as a "photogram," which doesn't use a lens; it's a shadowgram. In other words, he takes sensitive paper or film and he puts things on it or over it. Some things may be solid, others translucent; some things intensify light, and some things just cast shadow. You perhaps expose for a short moment, and then you rearrange these objects and make another exposure. What he's doing is getting a quasi-abstract image without reference, you see, to the optical image. Now, it would be possible to combine them, so you can't be rigid about it. Pirkle Jones did some perfectly beautiful things.

*Weegee was the professional name of Arthur Fellig.

Adams: I think he used honey and objects on it. Honey would float over the paper or flow between paper and glass and leave these beautiful patterns. And they were of very fine tonal quality. Moholy-Nagy's were usually very careless in this respect, very unspotted and blown up big, and then he would claim that they were "constructions." But I don't think they were. I always used to say, "Well, if you want to do that, why don't you draw? Why don't you do what Kepes did or Herbert Bayer or a lot of people did, really? Draw your quasi-abstractions." But then he'll show you something where you get a translucent glow or reflections, say, through a glass sphere--you can't draw that, you see. So, I think the photogram isn't really photography, it just uses photo-sensitive material, but with beautiful results.

There was a woman here that died, Margaret Valeceritos, who would make a negative, and then she'd put it under hot water, and the gelatin would melt and flow, and she'd get very weird and lovely things. Then they came out with the new synthetic emulsions and they won't melt, so she was frantic; she couldn't follow her career in that direction! [Laughter] I guess that's life, you know.

Nuclear Bombs and Photographic Materials

Adams: If nuclear explosives were fired in the atmosphere, photography would be in a spot. That would be the end of it. I mean one little nuclear device in Lake Ontario and Kodak would be out of the picture, because you couldn't avoid the radiation specks in the sensitive materials. And to get a clear sky would be practically impossible. So we're keeping our fingers crossed. Peace at any price!

Teiser: Have there been any effects on photography of the Nevada blasts?

Adams: Oh yes. The big one that got away from them sent a hot cloud east over Utah, and everybody had to go indoors at St. George. It hit a Union Pacific freight train on its way to Los Angeles. There was a whole car of Eastman film with a lot of x-ray film. Our doctor in Yosemite called me up one morning and said, "I'm stuck; I'm having a terrible time. Can you come and look and see if you can figure out what's happening?" I came to the hospital and, gee, there were these awful-looking spots on the film. So I said, "Let's take one out of the box and develop it." It had the same defects. Then I looked at it, and then I knew what it was because I'd read about it. The ray striking the film is so powerful it desensitizes it, so there's just a little transparent hole burnt in the emulsion--a bullet hole like my Black Sun picture. And then the energy is dispersed sideways so there's a halo. It looks like a doughnut, with a kind of hazy outer

Adams: edge. And the more powerful it is, the bigger the doughnut, and those were all over the film. The ray went right through the packing, and--probably penetrated that without restraint, until it hit the foil, then it was scattered and activated, and turned from one level of energy to another, which then affected the film.

Then that same cloud affected cornfields in the Midwest, where there's some factories that make cartons out of cornhusks. A lot of the crude paper that you see has everything, including cornhusks, in it. The Kodak yellow boxes for film--a lot of them are made of that, and some of that stuff was radioactive. DuPont had to close their plant for a week, cut off all their air conditioning. Kodak had self-internal cycling, and they could go ahead. Of course, long before the time the cloud got to Rochester it was so weak there was no danger to humans, but nevertheless, there could be some ruined film and paper, and it got a little hairy for a while. So if you had one big nuclear explosion, you'd have very serious trouble--although it might not be affecting you physically at all. We apparently can take a lot of radiation; we have background radiation to contend with constantly. I've seen the white flashes, the cosmic ray flashes the astronauts write about. I've seen that a lot. People always say, "Well, that's just a capillary bursting in the retina or in the brain. That happens to everybody." Now it's figured out that it's cosmic ray impact on the optic nerve or back in those receptors. Just a flash. You close your eyes and you see it when at high altitudes.

Nature Photographs: Points of View

Teiser: We were talking about the use of photography in conservation in general, in maintaining a decent world. I guess it had better be used in its own self-defense too, hadn't it?

Adams: Oh yes. That's important. Well, the full use of photography, I believe, has to have some kind of a project, whether it's a business one or a social one or just a personal series of photographs to express what you think--I mean, a reason for doing it. Not just go out and go "bang, bang, bang" and hope you find something you can use.

In the conservation world, [This is] the American Earth was a rather heroic thing, one of the first books on the conservation theme. And there we brought in the human theme as well as the natural. The implication of the beauty of nature that's needed in a world so that you want to continue to live in it. But now you find people who are doing just countless pictures of natural details and birds and bugs and sunsets without the human connection. And what it does is to

Adams: give a lot of people who know about it a certain happy confirmation-- "that's what I like too" feeling, you know. And the ghetto people and the unfortunate classes and groups, they can't possibly understand it. And there's a big resentment coming now among the poor of the country and the racist groups--a resentment against spending all this money on wilderness, which to them is just pampering thousands of acres of nothing, when that same money should be going into housing and better education. They have something very important there, from the human point of view. They feel that politically or tactically, I guess, the approaches aren't making for a balance. So for every ten million that is put into a national park or wilderness area, there should be an equivalent amount that's put into education and human welfare. But then the whole thing becomes totally ridiculous when you think they're spending enough money every day of the [Vietnam] war to establish a national park, or clean out a ghetto. Then you have this conflict all the time between the people who had an early experience and were conditioned to certain things relating to nature, and the people who were raised in cities.

We had a group of underprivileged children up at Yosemite, and the kids became terrified and had to go home a couple of days before they'd planned. They were away from other people, and all these big things just scared them. So that's another subject, and a very profound one, in a way.

[End Tape 3, Side 2]

[Begin Tape 4, Side 1]

Adams: Where were we now?

Teiser: I was about to say that I was interested in the fact that you used one of your earliest sets of photographs of the Kings River Canyon in the interests of conservation and took them into Washington--

Adams: Oh yes, I used--

Teiser: Could you tell about that episode?

Adams: Well, I'd had a tremendous collection of pictures of the Sierra Nevada that appeared in various Sierra Club things--in the John Muir Trail book*--and I made some enlargements for display for congressmen. So the work was chosen because--well, put it this way: there were thousands, maybe millions, of pictures made, but I came along with a creative interpretation which got over. And Cedric Wright's work does the same thing. Quite a number of young photographers now do

*Sierra Nevada: The John Muir Trail. Berkeley: The Archtype Press, 1938.

Adams: very beautiful work in the wilderness--in the mountains--which is much more than factual. And you could take, say, all of Joe Le Conte's pictures of the High Sierra, which are very valuable historically, and they'd have little impact; they'd just be pictures of places and nobody would be moved. Well, he didn't intend that they should be "moved." It's no criticism of him; he was a mechanical engineer and a scientist. So, his photographs were nil as interpretations; they were invaluable records of places that he had explored and mapped. The Sierra Nevada meant tremendous things to him. But the element of art interpretation just simply didn't interest him.

Teiser: I was looking at Helen Le Conte's copies of the Sierra Club Bulletin, at your earliest photographs and those of a variety of other people, and the distinction between why you were taking them and why they were taking them is apparent.

Adams: Well, it's a different point of view. But you see, that's the meaning of "photography is a language." Take the English language, and you can use it for classified ads and scientific papers and news reporting and poems and essays, all forms using the same language. So when you say Joe Le Conte's pictures aren't any good because they're not creative, you are wrong. What you mean is that they don't stir you emotionally and aesthetically, but that wasn't their function. Their great importance is as records.

One of the great problems we have in our Friends of Photography: our charter reads that we are to further creative photography. Well now somebody comes in who's been over to Africa, and they've got a lot of pictures of wildlife, and he thinks they're just something wonderful, and he's a member, and he wants to show his pictures. Sometimes you can tell him why you can't show them--but other times you can't. Some people just simply can't understand. They never go beyond the subject. Here they have an elephant, and it's a fairly good shot of an elephant. But you know, you say, "Well, that's an elephant" [laughs], but period! And a lot of people just have no idea what you're talking about when you try to explain that you see it at a very low level of imagination and a high level of factual information.

Well, let's see--we have skipped around.

Teiser: Everything you've discussed brings up more--

Adams: Well, that's fine--

Teiser: --questions and thoughts.

Quality Levels and Portraits

Teiser: Maybe this is the stupidest question in the world, but I'll ask it anyway if I may: when you first started taking photographs seriously, who did you think was going to look at them?

Adams: That's a very good question. I don't know. I must have had an ego, because I made a holy pest out of myself, wanting to show everybody the pictures. So it might have been an ego motive there. I figure that a lot of artists may have that; maybe I still have it. I think it was largely to show where I'd been. And then there's always the competition among photographers: you like to show them what you're doing, and they like to show you what they're doing.

Imogen Cunningham--she's quite an extraordinary person, very comprehensive; her world is a very rich one, and a very uneven one. In other words, her technique would fluctuate--good and bad prints, variable, creative. Intensity will do that. But when you stop to think of other people, practically all do that. Stieglitz was highly selective, and he threw away many things, so that he probably had what appeared to be a rather low volume of work. But you don't know how many bumps and holes there are in any career. And Strand was the same way; he was very selective. Weston wasn't. It's difficult to not edit Weston. [Richard, known as Dick] McGraw over here has about eight hundred prints (made under Weston's supervision by his sons Brett and Cole) which he's giving to [the University of California at] Santa Cruz. And he admits himself that there's two hundred in there that are poor photographs, but he feels he should show the whole work. Well, I have 27,000 negatives at least in that vault right over there, and some are pure junk. I don't know why I'm keeping them. Some have great historic value because they were taken in Yosemite--and no other value at all. Others have narrative value, such as could be used as illustrations or even advertisements. And then a certain small percentage have aesthetic or creative value, which means it's the work you really should present to the world.

So it's "operation wheelchair" as I call it. It means getting in and printing and trying to make the segregation, because otherwise it's going to be an awful job for my estate. Because things aren't really defined very well. The dating is hopeless--and even the titling. I have portraits of Thomas Moran, Ina Coolbrith, a fair one of Robinson Jeffers, Albert Bender, Edward Weston, Fujita, Phyllis Bottome, Bennie Bufano. And some of them are very good photographs. A few others are no good at all. The one of Moran is one of the old glass plates, completely fouled up by over-exposure and over-developed. His white beard is just a glob, and there's nothing in the shadow areas of the negative. But that and the Ina Coolbrith picture have a certain aesthetic quality. So if you take those two and put them together--early 1920s, you see--they suddenly spring into something

Adams: out of logical life. And if you suddenly find those in a contemporary collection, you don't know what's happening. It's like finding a baby nipple along with a martini shaker. [Laughter] It'd be quite a shock.

Teiser: I suppose everything has to be taken in context. Those portraits that you were listing then, and some others I remember, I have them in my mind. I was looking recently again at the one that you made of Carolyn Anspacher years ago--that seems to me a portrait that stops one person in time. Although I've seen her since, that's my idea of her.

Adams: Yes, that's one of my best things. A very noble one of [Gottardo] Piazzoni--the painter on his scaffold. That's one of my finest.

Teiser: You don't think of yourself, I suppose, as a portrait photographer. But as I think of them--the one of Albert Bender--

Adams: With the flower?

Teiser: Yes!

Adams: Well, I'm not a portraitist in the sense that I don't have a portrait studio and haven't done portraits professionally--

Teiser: Did you do those mainly because they were friends?

Adams: Part of it, yes. I just wanted to photograph them. Let's see-- Colonel [Charles Erskine Scott] Wood, Sara Bard Field, Ernst Bacon. Sometimes people have asked for pictures. I did a recent one of Sandor Salgo--the conductor here--a Hungarian. They wanted me to make a donation to the [Carmel] Bach Festival, and so I donated the portrait. And it came out quite beautifully. And that's the way these things emerge. But I mean I never had a portrait studio as such, because I couldn't imagine anything more difficult or uncertain than trying to do portraits of random people. You don't have a chance to know them. I don't want to be the Bachrach of the Monterey Peninsula. [Laughter]

Edward [Weston] made his living largely with portraits. Some were very effective. But I don't think it was his best work. But his picture of Albert Bender is superb.

Teiser: I don't remember that.

Adams: Well, that's a good human image, but not a great photograph.

Albert Bender

Teiser: You were going to speak about Albert Bender.

Adams: That's very complicated. I met him first at Cedric Wright's home in Berkeley. Let's see, it was a musical evening, but Cedric said, "Show Albert Bender some of your mountain pictures." Albert was very much impressed and said, "Come and see me tomorrow morning, and bring some prints." Well, I showed him some work and he said, "We have to do a portfolio of these." It was the furthest from my thoughts. I was still trying to be a pianist. So I said, "Let me think about it."

In two or three days I went down there again in the morning with a big bunch. He selected a number and he said, "Grabhorn will print it. And Jean Chambers Moore says she'll publish it, and now we've got to sell some copies. So--how much is it going to cost?" So we had to figure that out, and it cost quite a little, as all such things do. I never counted my work in it; that's the way you do these things. So he started off with five copies. Now, they were one hundred dollars apiece, I think, which was high for those days.

Then he calls up Mrs. [Sigmund] Stern. "Top of the morning, Rosie. How are you? Well, I've got a man in my office, and he's got some pictures and we're going to do a portfolio, and starting it off," he says, "I'm taking five hundred dollars."

She says, "Well, Albert, put me down for \$750." "Thanks, Rosie, that's fine." Then he calls Cora [Mrs. Marcus] Koshland. "Top of the morning to you, Cora." Describes what he's going to do with the portfolio--"I've put in five hundred dollars and Rosie put in \$750"--Rosalie--and she says, "Put me down for five hundred dollars, Albert. I'd like to have the work." And in just about two hours' time on the telephone, he'd sold much more than the cost of the portfolio.*
[Laughter]

He wasn't a rich man; he was well-to-do. He had a good insurance business. And of course he was a bachelor. And he just gave away a tremendous amount of things and money. But mostly in small parcels. He never gave really large amounts--he didn't have it. But some artist would come and show him some pictures, and Albert would buy one, give him a hundred-dollar check and spend an hour or so on the telephone getting contacts for him. It was that kind of true philanthropy. I mean, he just didn't write checks, he really helped people. He was the most generous man, by fifty times, of anybody else I've ever known.

*Parmelian Prints of the High Sierras. San Francisco: Jean Chambers Moore, 1927. See also other references as indexed.

Adams: So it was this kind of patronage that really got me started. And even during the Depression times, there was always something to do. I did a catalogue for the de Young Memorial Museum. Bender had a group of very handsome Chinese carvings, and we made a portfolio of that for Mills College. I don't remember the circumstances, but I think there were ten or twenty images in each set and they sold for several hundred dollars apiece, and the proceeds then enabled him to buy these marbles for the college. So, many things were done on that basis: I'd get a fee for the job, then he would sell four or five copies, and the difference would allow things to happen.

Commissions

Teiser: Those were the first photographs on specific commissions?

Adams: Some, yes. Now, I did the Maurice Sterne paintings for the Department of Justice Building. He painted them in San Francisco, and I did them at his studio at the California School of Fine Arts. It was terribly hard getting even light on them because they were very big. And I have a beautiful portfolio of that. I did Coloramas for Kodak [i.e., Eastman]--big things to be shown in Grand Central Station. And I did--let's see, Fortune magazine, general advertising commissions, and then worked for the Yosemite people. Later on, projects would come up like Timber Cove. And I did a whole series of pictures of Laguna Niguel. They said they wanted to have these pictures to guide the development. They absolutely ruined the place; it didn't guide the development at all!

Then I did an enormous series of pictures for the University of California of the Santa Cruz campus before there was anything developed there. And that was very valuable because the architects could see what certain areas on the map looked like.

Teiser: I wonder if those photographs didn't have something to do with setting the tone of that whole campus as it is now?

Adams: Well, put it this way: it's only half what we wanted. The architecture is, I think, sad. Better if it had been something like Foothill College. They should have really gone to the Maybeck feeling, where you'd have a blending of the buildings and of the out-of-doors. But Crown College is like a suburban housing project. Stevenson College looks like pictures I've seen of "British Bauhaus." Very tight little buildings. I don't know any one that really is appropriate. And College Five is done by Hugh Stubbins who lives in New York. It's just hideous. I mean it's an imposition right on the landscape. Here's one of the grandest groves of redwoods standing alone anywhere, and there's absolutely no consideration for it. They crowded it with a wall. It's really "brutalesque."

- Teiser: I think I was speaking not alone of the physical development of the buildings but of the whole spirit of the campus.
- Adams: Yes, that was the idea. We tried to keep the meadows, and succeeded in the main.
- Teiser: The students have seen those photographs, haven't they?
- Adams: Oh yes. I have students calling me up and wanting me to protest against something that's going in.

Tommy [Thomas D.] Church and I did the definitive paper on style--the photographs were part of that--what the University could represent in terms of style in relation to the natural environment. And I just got a letter the other day saying that was still the guiding light--although sometimes it was very difficult. This present hideous [state] administration is really very negative to that college idea. They want a college right in the middle of the city in one unit. They think Santa Cruz is very "extravagant." Well, I don't think it has cost any more, and it certainly has a tremendous effect on students. But the plans--you can't afford to have the expensive plans. So they're allowed so much square foot cost, and the architects have an awful job getting these things to work.

Now, these bedrooms in Stevenson College are the worst planned things you've ever seen. I mean, you can hardly get into the closet door, around the bed, because it's so small. One foot more, but-- They planned a little lintel over the entrance doorway; it had to come out. They had some decoration, molding; that had to come out. The Finance Committee of the Legislature, or State Senate, just slashes the "amenities" out. They have no architectural advisors on what can stay or go. So instead of having that little extra something for style, it's up to the architect to do what they did at the Bodega Marine Laboratory; the building is of prestressed concrete, molded into beautiful designs. The building is a very attractive thing although it's nothing but big columns of concrete. But of course, they could afford to mold them into agreeable shapes, if no ornament was added.

I did a book on the University of Rochester.

- Teiser: What was that?
- Adams: A book on the university called Creative Change; it's a brochure. And then I did a book for the Bishop National Bank of Hawaii, The Islands of Hawaii; did that one after the one for the American Trust Company. You remember that book--The Pageant of History in Northern California. Well, then the Bishop Bank wanted me to do the Hawaiian one.

Adams: Then I did some work for IBM--

Teiser: What sort of work for IBM?

Adams: Oh, I just made a series to interpret the activities at the Poughkeepsie plant. It's a very ugly, modern, beautifully functional plant, and some of the things in it are very exciting. That picture on the wall, of the transistor, is one; it's all out-dated now. It's a computer world. So I got by fine there.

Then of course the big centennial project for the University of California with Nancy Newhall [Fiat Lux], and I'm sure I can think up other things as I go along.

Albert Bender and His Friends

Teiser: Let's go back to Albert Bender. We were interested in Mrs. Newhall's description in The Eloquent Light of your first trip to New Mexico with him. And who was Bertha Damon?

Adams: Well, Bertha Clark, who married Arthur Pope. She was quite a literary person, a very fine writer, and a great friend of Witter Bynner and Arthur Davidson Ficke. So we all went down there, you see, and met Ella Young. Of course, she and Bender always hit it off in fine form, because I think they had worked together in the University of California at Berkeley before World War I. Let's see, she's about eighty now.

Teiser: This trip was in 1927, wasn't it?

Adams: Yes. We met Ella Young and Marie Welch. And then Bertha and Arthur Pope separated, and he married Phyllis Ackerman--the authority on textiles--and she married Professor Damon of Brown University and lived in the East, and apparently did very well in real estate, developed areas with style. She did that earlier at Point Richmond out here. Beautiful houses. She's still living, and she's a good friend of Ernst Bacon who's here now, staying with us. (He lives in Orinda.)

So then we met Mary Austin, too, down there.

Teiser: Oh yes. That brings up another subject, but let's stick with Albert Bender.

Adams: I would take Albert--he didn't drive--on innumerable trips. We'd come down here to Monterey and Carmel every so often, and see all

Adams: the friends--Robinson Jeffers and Johnny O'Shea and Kriley--a kind of a circuit. Albert liked nature, as a Christmas tree with human ornaments on it. He didn't care much for the natural scene; he just liked fresh air and people, which is wonderful.

Then we'd go over often to Mills College with the back of the car laden with books and things, maybe some Chinese things he'd gotten. We went to Yosemite, and I can't tell you how many trips in all. He'd call me up and say, "Well, Dr. Adams, are you free today?" Sometimes I wasn't, but I would certainly make an effort to be. And we'd get in the old car and go out. Knew somebody at Napa--writers--and knew somebody at College of the Pacific over in Stockton. We'd drive over and see these people and go and see printers. And then people would come. He'd entertain. He was a great friend of Ruth St. Denis. And I remember we drove to Los Angeles to hear the San Francisco Symphony, and Ruth St. Denis's group danced with it, and we took her down--she and Ted Shawn. We drove down to Los Angeles.

I'll never forget that day. We went to an apartment for dinner--Mrs. Guggenheim of the Guggenheim family. And this was a whole floor in one of these Hollywood buildings, and it was very elaborate--wow! She had gorgeous things in it. She said, "Of course, you'll leave your car here and we'll go over in mine because it's so difficult parking--and my people can handle it much easier." So that was fine.

So after this very elaborate dinner we go downstairs and here's a great big Rolls Royce, really custom-made; everything you can think of--a huge thing. And a chauffeur and a footman. So we get into this thing. Oh, it was beautiful, and these little cabinets! I said, "Do you drive this car from New York every year?" (Because she spent winters in New York.) "Oh no," she said, "I have the exact duplicate of it back there." [Laughter] Albert Bender was horrified, shaking his head. He always thought such great affluence was rather silly. Mrs. Stern entertained beautifully and was always doing something for people, but very seldom if ever would have just a stupid social party. It would be a dinner for somebody like Diego Rivera. And when she put on a dinner, there was probably none better. Just great style.

And Albert Bender would have entertainment, but he didn't drink. He was an Irish Jew. His father was a rabbi and his mother was an Irish woman. And he came over as a boy and worked in his cousin's insurance business. But he never drank--I don't know whether he didn't like it or why. But he always had liquor in his home.

Adams: He had an old lady housekeeper who didn't know anything about it all. She'd cook him this disgusting-looking plate of scrambled eggs for dinner. He'd come home after a big day and there'd be two pieces of toast and scrambled eggs. When he had a dinner, he'd get somebody in. But he would have parties, and she would have scotch and ginger ale and no ice. She'd always forget the ice. [Laughter] So his friends gradually learned and they'd bring some ice, you know, and put it in a bowl. But she knew so little, she thought ginger ale and soda were the same! Of all the horrible concoctions in the world, it was that. So there were these funny little lapses.

That Tibetan scroll was his--he eventually left that to us.

Teiser: Oh, hanging there.

Adams: Yes, that's handsome.

Teiser: Very. He served a function apparently in bringing artists of all ages and kinds together.

Adams: Yes. And he was very important in the creative printing world.

Teiser: You said he got the Grabhorns to print the text of your first portfolio.

Adams: Yes. But when it came to the Taos book [Taos Pueblo], he asked Nash to do it, and I had a preliminary talk with Nash.* He was going to cover the inside with Spanish parchment sheets. He had a whole lot of Spanish parchment sheets--music sheets. And I said, "Dr. Nash, this book has nothing to do with Gregorian music; this is Indian--Pueblos--Southwest." And he said, "Pueblo--Pueblo's Spanish, isn't it?" [Laughter] I went back to Albert and I said, "It's impossible. He wants to do something that's just impossible!" He was an ass, I must admit--really stupid. I said, "Can't we get Grabhorn to do it?" So Grabhorn completed it, with the paper all made to order. Half of it was coated by Dassonville, on which I made the prints, and the rest of it went into the text which Grabhorn printed. But Grabhorn didn't have that big a press, so he printed the four-page sheets (two to a side) one page at a time. Hazel Dreis was doing the binding, but the columns did not line up, and they couldn't be bound. I mean if she kept on folding, the columns would tilt further and further apart. There was no way of making the fold parallel. A very complicated thing. So that was a terrible blow. We just had enough paper left to print it properly.

*John Henry Nash.

Adams: But Grabhorn* would say, "You're crazy; it's printed perfectly." And they were beautiful pages to look at!

Albert Bender had come to Grabhorn's studio. And Hazel laid them out and got a ruler and a T-square. She said, "All right, now, Grabhorn, is that straight or isn't it?" "Well, it is off, I guess. Yes. We'll have to do it over." Well, what are you going to do when you've got a special run of paper? There was just enough paper to do it. I don't think there were six signatures left over.**

Then she wanted a special grain leather and she just ordered it and never asked the price. It arrives, through customs from Algeria or somewhere, and there's \$480 due on it. I didn't have eighty dollars. Who pays it? Albert Bender. So I tried to pay Albert back. I went and worked and things, but he was never--he always said, "Well, you just do your work. That's all the payment I want." He didn't consider me a business investment. [Laughter] And he was very, very kind. So he did give me the entree to a whole stratum of society and cultural level in San Francisco I never would have had otherwise.

Cedric Wright

Harroun: You said when you met him at Cedric Wright's that you were still in the field of music?

Adams: Yes, I was still an active pianist.

Harroun: Was this a turning point then?

Adams: Well, yes. This was almost--it really was the turning point, but I didn't know it. I tried to practice and keep up everything else too until 1930. Well, there's a very hazy point there, because even in 1932 I was doing accompaniments, and photography. And then it just came to the point that I couldn't do both.

*By correspondence:

Teiser: When you talk about Grabhorn, you mean Ed, don't you? You didn't deal with Bob [Robert], did you?

Adams: Dealings were usually with Ed, but I knew Bob quite well.

**See also other references to Taos Pueblo as indexed.

Adams: Cedric Wright, a violinist, was an old friend. He was the son of my father's lawyer. My father's lawyer was not very ethical, unfortunately, but Cedric was one of my dearest friends. I met him first in 1923 on a Sierra Club outing, and then we'd see him often, and he liked the way I played and I liked the way he played. He made some photographs too, and pretty soon he switched over, because he had a fairly large personal income. He never had to do anything, which seems always a curse. I will say he was very diligent. But at an ego level--I mean he just had to do these mountain pictures. He was very anxious always to get them out and to get applause. He wasn't a very good violinist. His first wife was a much better one, and I guess that's one of the reasons why they split, because she was obviously a very superior musician. He could have been a grand pianist--he had great big "piano" hands. But, he tried to get quality out of his fiddle, and the intonation wouldn't be ideal. But he had a very fine musical spirit. I mean, he could really bring things to life, like Ernst Bacon.

So that was my friendship there, and then he got into doing more and more portraits; finally did chiefly portrait work, except for his summer work in the mountains, and he did very well. And then he got older and more difficult and married a lady who really didn't help too much and had two kids who were difficult--one was very difficult, the other was all right. So he developed high blood pressure and had a terrible doctor, and they didn't take care of it, and he went a little off his bat. He had this kind of paranoia about education and public schools. He'd write reams of expository texts. When he finished this book, it was a foot thick. I said, "Well, you've got to have it edited. You can't print this." I said, "Get Nancy Newhall to do it." She boiled it down to some really very good writing. But he wouldn't accept that at all. He thought she was missing all the important points. I don't know what's happened to the text of the thing. It had some very fine passages in it--kind of Thoreau-esque. But otherwise just as screwy as you can get.

And then he finally had a stroke and never really recovered.

Teiser: Helen Le Conte was speaking of him, saying he was a genius without a field to express it.

Adams: Yes, that's good. He had the genius tendency, but he never realized it. I think music was right; he was very happy in it. But he picked the one instrument that his physique wasn't favorable to.

Musicians and Artists

Adams: Now, in a sense I've got a lovely violin hand. My fingers are very strong and light--very small. But I'm a pianist, see. I could never get the power, the richness somebody like Ernst Bacon can get, or my late friend Victor Babin. I suppose I'd have been an ideal harpsichordist. It's a very important thing--we don't think of those things often--but I didn't have the ear for the strings. I have beautiful relative pitch but absolutely no absolute pitch.

Teiser: I suppose it was hard to break away from the piano. People had encouraged you in it.

Adams: I could--I still can, if you'll pardon the conceit--produce a very beautiful tone. I was trained in tone control and voicing. I still amaze myself at times by the sculptural effect, which was my basic training. It was largely impact control, and of course the arthritis has knocked that. But it's interesting that there is a legato and there is an impact. You can especially hear it in fugues; I can really make the voices completely stand out, which is much more difficult with "weight" playing, to give the full color. The impact, touch--I had that, and it's really stayed with me all these years. I mean I play terribly now--inaccurately--but it's just interesting how lasting the training you sometimes get can be. And so, up to that point, I could have gone on and I could have been very fine in a very limited field, but when it came to doing the greater Beethoven and Brahms and the heroic Scriabin things, why--my fingers couldn't manage them.

Teiser: Did you realize that? Was that part of your decision?

Adams: I began to realize just part of it. But people encouraged me and said, "No, don't worry about that. Think of Laurie [Lawrence] Strauss." You remember him. Tenor. He sang French and German lieder and had a very meager voice, but such style you wouldn't believe. You still remember him. And the question is, what is music? This man could create--he was simply wonderful. It was something like [Vladimir] de Pachmann. I don't think de Pachmann ever played anything very massive beyond Chopin. Farthest I got with Scriabin that I could play was the C-sharp minor etude and that really taxed me. I really didn't have it in my hands to do that.

V. Adams: [Entering] How're you doing?

Adams: Pretty good!

- Adams: Then of course I was very close to Sara Bard Field and Colonel Wood--Charles Erskine Scott Wood.
- Teiser: How did you meet them?
- Adams: With Albert--early, 1927 or '28. And of course I met Bennie Bufano.
- Teiser: Did all of these people in the other arts add to your creative vision or whatever?
- Adams: Oh yes, very much. Very definitely. Not that I imitated. You couldn't do that with them. But you just had a support of your convictions. I mean, here are people creating beauty in other ways--Maynard Dixon, Dorothea Lange, Robert Howard, the Puccinellis--oh gosh, I can't remember all the people.
- Teiser: That's Raymond Puccinelli?
- Adams: Yes. I know very few of the contemporary artists.
- Teiser: Of these artists, I don't suppose you admired all of their work?
- Adams: No--no. Some more than others. Bufano's drawings were simply magnificent; some of his sculpture was pretty corny. Sara Bard Field's poetry was better than the Colonel's. [Ralph] Stackpole, I think, is a fine sculptor; beautiful massive work. Ray Boynton did an encaustic for the Woods, which was absolutely beautiful, more so than his paintings.
- Teiser: For the Woods at their home?
- Adams: Their home. An outdoor mantel. But they had not sealed the stone and the water came through and it flaked.
- And Maynard Dixon was a great man, a character. (I don't know. You can't really remember all these things.) Piazzoni was a great stylist; very quiet. I think I like his paintings better even now than I did then. They looked flat to me.
- Teiser: Did you like some of Maynard Dixon's work?
- Adams: I liked his drawings much better than his paintings. Beautiful drawings.

Oh, and then another contact which was very valuable to me was William Zorach, the painter, and his wife, Marguerite. We have two Zorachs downstairs, one by him, one by his wife, watercolors in Yosemite. He was there one whole summer and went on trips. He was really marvelous--a creative thinker.

Adams: And then of course Diego Rivera and [José C.] Orozco. And many of the printers. [Interruption to discuss a photograph with Adams's assistant.]

Arnold Blanch, the painter; Maurice Sterne.

Teiser: Did you talk about aesthetics with these people?

Adams: No. When you're in the art world you don't talk about aesthetics; you just talk. The aesthetics are a by-product. They'll talk about their experiences, they'll talk about their style. They'll see something in your photograph that they like. You don't think about it in terms of aesthetics as such, you see. And it's interesting, when photographers get together they talk about papers, lenses, chemicals, cameras--very seldom about the pictures. When painters get together, they talk about painting--and very seldom about paints or paint brushes. When musicians get together, they talk about other musicians. [Laughter] They'll say, "Oh my, Rosenthal, you know, he did that Beethoven all right. But Horowitz--somebody else--Backhaus--" and before you know it, they're talking about "when I was concertmaster at such and such."

You know the famous story about Mischa Elman, who was talking to this young girl at a dinner, a beautiful young lady, and he was describing all of his career--coming to this country, and his tours. He could see she was getting a little bit restless, so he said, "Oh, my dear, I'm so sorry, I'm boring you. I'm talking about nothing but myself, and that is too much. Now let us talk about you. How did you like my last concert?" [Laughter]

[End Tape 4, Side 1]

[Begin Tape 4, Side 2]

Adams: Through Cedric I knew Richard Buhlig. He was quite a pianist, but he had the most colossal conceit I've ever seen. He said, "After all, you can count the great pi-ah-nists of the world on one finguh." [Laughter]

I met him one time in San Francisco, and it was a very gray, foggy day, and he was exhausted, and I was going to take him on the streetcar out to my house for supper. He sat there in the streetcar in a very dejected way, so I kept talking. I figured I just can't sit there like a dummy too. So I talked and talked about the symphony and other things.

So we came home to the house, and he sat down--in this chair--and took off his necktie and said, "Let us have silence, blessed silence. You talk a very great deal and say ab-so-lutely nothing." [Laughter] So that was a helpful influence. I've been thinking

Adams: about that; always have, you know. I just pattered along, trying to keep him going--a gesture.

Ernst Bacon came on the scene early. And Ernst was a very fine pianist--very well trained; great ladies' man, marvelous person. (I hope he can hear me.) And he would play--well, he was typical of a certain type, a kind of spectacular, ruthless playing, you see, which overshadowed anybody else around. I couldn't play when he was around because I played a totally different way. We had a period there, a kind of first jealousy, I think. I was more jealous of him, because whenever Ernst appeared, he was the magnet, you see. Well, the thing that saved that situation was that he was such an extremely fine musician. And he can still play a Bach-Busoni chaconne like you never heard. So after the first couple of years and adjustment, why, we became extremely close friends. Mutual admiration society, but at the same time it was the first time I'd come across this very gentlemanly but very aggressive personality. That was another kind of competition.

My competition was always--if I felt it, well, I do the best I can and that's that. But sometimes--wow!--it's like having a show in a museum and in the next gallery there's somebody who has nothing but three by four-foot prints. They might be lousy, but they still would be impressive. [Laughter] Perhaps superficial.

But Ernst is one of the best we've got, and a great composer. He's never been recognized. He never makes any real bid for fame, but I think his set of songs to Emily Dickinson poems is probably one of the greatest American works--just incredibly beautiful. He still belongs to a generation that had "something to say." The contemporary music to me seems to be almost mathematical efforts to experiment with new symbols and sequences and combinations. You get through with it and you think, "Clever, isn't it?"

I remember hearing one--I think it was in Boston. I was at a friend's house, listening to the radio, and they couldn't wait to hear this thing, and there was percussion and strings and two trumpets and jew's-harp--some combination. And you know in the cartoon "Peanuts" the bird that's talking to the dog? It's just a genius flight of imagination to get this conversation of the little bird; it's nothing but a series of little dots, you know. That's what that music sounded like--rumble, rumble, rumble, squeak. Then a pause. Then somebody taps seven times with a bow. Then there's a tremendous, cacophonous, dissonant chord--with more rumbles, then more squeaks. They then showed me the score of this, which wasn't written like any music I'd seen before. There were no bars, and all these strange symbols. We got all through it, and I said, "Well, what happens to you when you hear that?" "Perfectly wonderful." "Well," I said, "what happens? It is clever, but I didn't--" Well,

Adams: they really couldn't describe an emotional experience; it was an intellectual experience, and therefore it was aesthetic. But you've got to make definitions between intellectual, aesthetic, and emotional. And great art has all of it together, and a lot of the contemporary stuff....

Cults, Controls and Creativity

Adams: And in painting, huge paintings may be just intellectual exercises, and I think people respond because such response is indicated in the social structure. To be in--(quote) "i-n"--you create certain things, like certain things. It's a multi-cult.

That same thing happens in business methods. The thing in business now, and in industry--well, Dr. Land worked very hard to establish what he called "peer consciousness." Everybody in the [Polaroid] company that would be, say, at the level of the engineers, there wouldn't be a top engineer or a bottom engineer; there would be sort of a group of peers, which means you're equals in that field. He didn't like the idea of them electing a chairman. They'd have a secretary who'd just call the meetings, and they'd appoint a chairman for the evening. They'd discuss it. And they got by like that for a while. But it worked better with the custodians and machine operators than it did with the intellectuals. After about a year they had a chairman and a vice-chairman--all that rigamarole. Became a society.

Teiser: We sometimes think of societies as something that people who have little create for themselves.

Adams: Well, I went to this big conference the other day--the Society of Photographic Scientists and Engineers. There's about three thousand members, and they're all the top people in the optical and physical and chemical laboratories. And there were about six hundred at this conference. They were a little disappointed in the turnout, but they're expensive. And they said they never had better papers, but the papers were, to me, incomprehensible. But I felt very much "in", you see, that's the interesting thing. I had a lot of friends. That was pleasant. I was just in contact with a world which I know is important and which is really back of my profession and the materials I use. But I don't really understand that world at all.

Teiser: Did you speak to them?

Adams: No, not this time. I did before once.

Teiser: When you speak to them, what do you speak about?

Adams: Well, I was asked to inject the creative point of view, refer it to the materials, how research has helped or hindered certain materials. My talk was on the obvious development of the films and the papers and chemicals; their consistency is perfectly wonderful. And then the tendency toward automatism in the cameras, which has just the opposite effect. I mean it discourages creativity, you see.

That trouble is coming up in films now; they're making things that are foolproof. In other words, they say they're foolproof and a person can't make a mistake, but it means that you can't control. Control is the whole essence of art. They are control-proof! So it's conceivable to think that you can have--I know there are films made that have an exposure range of one to fifteen, and the film will automatically carry it. It'll almost always come out in one limited scale. And that would be disastrous. It's just like if a paint company said, "I'll put out twelve colors, period." [Laughter]

O'Keeffe feels that. She grinds her own pigment. A lot of the paintings in New Mexico are done from the stones she's just picked up in the desert. She gets the kind of thing she wants--directly and perceptively!

Teiser: You can't do that with photographic materials.

Adams: No. No, you can't. But you still can control. I can under-expose, use less exposure and more developer, and increase my scale and texture. But the modern films only allow one-zone expansion. I keep thinking in my mind I'll go on to another paper. There are only two films made by Kodak that have the old thick emulsion, and that will "expand" in prolonged development two or three times. Now some printing papers are given new synthetic emulsions, and they "dry down" distressingly. In other words, the print will look perfectly beautiful in the wash water, but you can't use it when it's dry. So there's always this problem of having to print light, to print unpleasantly light, and then it'll dry down. Then finally you learn just about how deep to print. But in the old days, you could put the print up on a white thing, and it would look that way when it was dry.

Now there's one paper called Varilour, that is just impossible. It isn't just a matter of tone. A white surface goes gray. The first time I had that happen to me was with a print in a portfolio, of the little Hornitos church. It's got very subtle clapboards showing. It's a white church but you barely see the little clapboards. And I made the print so you just saw them, and I thought, "Gee, that's beautiful!" I knew it was going to dry down--hopefully just a little--so I went ahead and made the whole hundred

Adams: prints. Had to throw them all away. The white went down--gray, you see. So then I had to start the next day and make a whole series of exposures and develop them and put the exposure time, etc., control on the back. And the one that I chose, which showed the clapboard beautifully in the dried print, absolutely did not show it in the wet print.

The point is, as the emulsion swells, the silver grains separate like an expanding universe. And then the light penetrates--does not have opposition. And then as the emulsion dries, it brings the silver together and you see it.

Teiser: European papers have stayed pretty much the same, have they?

Adams: No. They're changing too. Agfa Brovira is probably the most brilliant, Ilford is fine--I don't always like the surfaces. None of them are as consistent as Kodak.

Prints: Tangible and Intangible Aspects

Adams: It's an interesting thing--the thing we have to think about is: what do you experience when you see a print? That is, what is a print? There's a whole series of grays, from black to white and grays in between. Well, if you strip the emulsion off a print, which you could do, it's a very soft image (if you look at it as a transparency). And you wonder, "Well, how in the world could I get a good print out of that? Isn't there some silver left on the paper?" No. The idea is that the paper reflects 90 percent of the light falling upon it, and you may have a 50 percent layer of silver in one part of the image. Now, say a hundred units of light strikes the surface of the print. Fifty percent gets through the silver and reaches the paper (the background), and 50 percent is reflected by the paper (which only reflects 90 percent). So 45 percent of that light is reflected back through the 50 percent silver, which reduces it to 22 1/2 percent. So then you have that value which would be known as a 22 1/2 percent reflection density, 0.75. And that is why, you see, printing is a very subtle thing, because the heavier the silver deposit, the deeper and deeper the tone. And finally, with toning I can get with selenium down to the reflection density of 2.3, which is 1 to 200, speaking roughly. But visually it would be awfully hard to tell the difference between a density of 2.0 or 2.2 or 2.3; you'd have to have a bright light and put them right together.

The Polaroid is a different process and has what is called the "linear scale." Your ordinary paper scales have the sine-curve shape, the "S-curve," the positive curve. Now the part of that scale which is most accurate or at least in proportion, is what they

Adams: call the straight-line section. But the whites and the blacks belong in the toe and the shoulder, and they are disproportionate. They can cause you all kinds of aesthetic upsets, even though you can't describe it; you can't be fully aware of it, but it's there. The Polaroid has a long straight-line scale, so the mind unconsciously sees in the Polaroid print a progression of values which seems much more agreeable.

Look at that picture over there, the marble head and the leaf-- see it on the wall?--I can't make a print like that with a conventional paper. I've got a good negative of it, as well as a Polaroid print. I can't make as good a print. I can't get that luminosity, because in the areas that are most subtle I can't get the proportionate scale. In that and the auto-masking process, which is equivalent to the old printing in sunlight, you do have a continuous line. It's not an obvious sine-curve shape.

There's an article out now trying to rationalize and put it almost on a computer basis. What is the character of Mozart, or Beethoven, or Schubert? What do you get looking at certain painters? And they've made these tests--certain responses on a pressure basis. Very complicated thing, and it just draws a curve. They give me a test, perhaps, and I would respond to certain things, and they'd put that curve on file, and take your test. And the strange thing is that they've found that it doesn't make any difference who you are; your curve in response to Mozart is typical, and it's quite different from your curve in response to Beethoven. The response is not basically individual; there's something in the aesthetics, something in the music pattern that controls it. And the same with the photograph. Why do you look at one print by a sensitive printer and the same subject printed by a good but unimaginative darkroom man, a technician, and respond differently? The difference might be such you'd think it was not the same picture. And yet if you put it in the reflection densitometer, you might get almost the same scale. It's a very subtle thing. So that's part of my approach in teaching, and it is going to be more so in writing now. It's a kind of a summation of experience. But to make it highly valid, I really should work through a scientist. If I'm going to talk about values in any way, I ought to double check, you see, so I'm just not transcribing my own symbols. It would have to be something that's understood.

Teiser: Well, you mean you have to translate subjective judgments into objective?

Adams: Have to do it some way, because if I talk about a print--like this print of Half Dome ["Moon and Half Dome"], this big one--I must say that I can make it in varying ways. If I go light to a certain point, it becomes weak, so I tear it up. If I go dark to a certain

Adams: point, it becomes hard and heavy, so I tear it up. But in between is quite a range of difference, and some levels are acceptable. Now, what is that range? It's the intangible thing that makes it art instead of record.

Teiser: When we were speaking with Mr. and Mrs. Spencer* last week, I asked, "Do you think Mr. Adams's work has changed over the years you've known him?" Mr. Spencer said, yes, he thought a little, in that the line had become sharper. And he was showing us a print of Half Dome with the moon--that same photograph--as an example of what he thought your work had come to. He admired it greatly. And he seemed to think that you would not have made that photograph in that way earlier.

Adams: He's right. He's an extremely perceptive man--both of them can really talk intelligently about aesthetics. It's a very rare thing--and they are rare people. They can talk and analyze things in the most extraordinary way, rather impersonal and very delicate. Of course, she's a great expert in stained glass--antique glass--one of the top people. And to have her talk about these significant slight differences. And it isn't just a matter of different glass, it's just that intangible multiple quality of color and value. They're always amazed that I like Rouault, because most of Rouault's work is related to the stained glass appearance, you know, with the black separating lines. I never thought of it that way, you see. I just liked these beautiful blocks of color. And, Mrs. Spencer said, "Well, do you know that Rouault's paintings superficially look like stained glass." And it suddenly occurred to me, "My gosh, they do, don't they?" They do and they don't, but they do enough so you can think of it.

And then, what is the function of glass? Why all these little shapes? Then you take a flow of glass, of shape, and you see that each one of these shapes has a dynamic relationship to the next one, and that will lift your eyes--move your eyes. It's a very subtle thing. You just don't put about random globs of glass. The shapes are all felt--like mosaics. Gerry Sharpe, who was quite a fine photographer--she unfortunately died early--she worked for us for quite a while and she did that mosaic table, which is an extremely sensitive thing. I forget who she worked with--Louisa Jenkins or somebody. That's the first and only one she did. But there are very subtle juxtapositions of shapes and values therein. They flow. It's very hard to describe.

In photography, if I can say it, I think my work has that flow, and I think that's what makes it have a certain appeal. It's what all creative photographers must have, because people do respond to more than fact. And I guess I really sell more prints than anyone, and sell them to a quite varied audience. So I know there's a response somewhere. Weston didn't sell too much while alive; he

*Eldridge T. and Jeanette Dyer Spencer.

Adams: surely sells now. People are paying fantastic prices for remaining prints that appear every once in a while. But he sold to a rather limited audience, and didn't sell very many. Some people with means would buy a hundred prints for a collection of an art gallery or a museum. And that was fine; it would keep him going. But the individual prints were not acquired as they should have been.

Now, of course, I think all the time, probably a lot of my pictures are sold because of the subject. But it's the subject plus. A literal picture of the moon and Half Dome would almost have to be very unpleasant. "Gee, there's the moon, Bud, look!" [Laughs] That's about the end of it.

Teiser: Do you know we've kept you talking for two hours?

Adams: Yes. I've got to go to a party, then out to dinner. I am a little bit thought out.

[End Tape 4, Side 2]

[Interview IV -- 19 May 1972]

[Begin Tape 5, Side 1]

The Group f/64 Exhibit

Adams: This time you wanted more f/64.

Teiser: Well, yes. We'll probably keep coming back to things you've mentioned and ask you more about them. The f/64 group--I'm sure you're sick to death of being asked about it.

Adams: No, no.

Teiser: We ran down two articles; one of them is just a notice. Shall I read them to you?

Adams: Yes.

Teiser: From the San Francisco Chronicle, an unsigned article of November 27, 1932--the end of a review of an exhibit of paintings.

"Another new exhibit at the de Young Museum comprises photographs by members and guests of the Group f/64. There is a beautiful work on view" (that is a typo, I guess) "although the promise of novelty suggested in the name of the organization that sponsors the exhibition is not carried out."

Adams: I don't understand what they mean by that.

Teiser: [Continuing] "These photographers, like other talented brethren of the lens, are admirable portrait artists, imaginative creators of abstract patterns, romanticists who look for charm in boats, in scenery, in grand landscape, and in every small growing thing that is nourished at the bottom of Mother Earth.

"Exhibitors include--"

Adams: Well, that's more favorable than a lot we had. [Laughter] It's funny. I don't remember that at all.

They didn't know how to write about photography then, you know. Just didn't know what to say. They thought some photography was

- Adams: imitating abstract art. I don't call it "abstract;" I call it "extract." A photograph is an extract, unless you go to a photogram. But using a lens, you can't really abstract--you can fuse and duplicate and double print, but you really can't abstract like a painter can, you see. So I think the word "extract" makes a little more sense. It's very personal; I think it'll never get in the dictionary. [Laughter] But an extract is to get the essence of something--it is of something. And the image of the lens is of something. It's not just production up here [in the head].
- Teiser: I suppose the distinction that most people make is that if they look at it and can't immediately tell what it is, it's abstract. Is that it?
- Adams: Well, then you have abstract expressionism--
- Teiser: No, I mean in a photographic sense only.
- Adams: Photographs. Well, in a lot of things that Weston did, he had a great sense of form. But people kept reading into this, you see, the constructivist idea of the painter. When they see the photograph, they think of it as something the photographer really did--in producing these curves and shapes. But all a photographer could do would be to select and enhance what he was selecting by the photographic technique, by his own approach. It's pretty tricky. It gets into semantics.
- Teiser: We were looking at a photograph of yours--I can't remember in what volume now--and on the opposite page was a photograph of Edward Weston's. The subject was the same--rocks, close up. Your photograph was, to me at least, immediately recognizable and his--if I hadn't seen others, I would have had to puzzle over it, and maybe I would never have discovered it. Would one really know that it was rocks along the sea?
- Adams: Well, it's awfully hard to qualify those things because the emphasis in Edward Weston's mind was not as much on nature as mine was. I mean, Weston was a universal person. He'd take an egg beater--of course I did too--but he'd take a portrait or he'd take anything that he saw that would comprise a statement--through which he could say something. Now, these words "say something" are very tricky, because you're not really saying, you're observing and transmitting and clarifying. I don't know; the words are almost hopeless. We use the word "visualization" when we see the print in our mind's eye. Well, we really don't. We see the image. We think of the edges, we think of the textures, we think of all that is appropriate. And then we have to look in the ground glass and see if we've really arranged the thing as we wish, and if we're watching our edges and if we're watching our confusions and mergers and all the little things.

Adams: It's awfully hard to say. In other words, I'm looking at you here--I see a picture. If I were a painter, I wouldn't have any problem at all because I could synthesize everything I see around here. But through the lens from this point of view, the sofa's cutting your neck right off under the ear, and the scene outside [through the window behind] is hopelessly confusing. You know, there are so many things, it would not make a good photograph. Now, I could go "click," you see, and I could get what a lot of people call just a spontaneous image. But that's not a communicative image. Not necessarily. Cartier-Bresson might be able to do it, but he wouldn't just sit here. He would move to a place where he would get you at the optimum advantage. The difference between a man like Cartier-Bresson and a snap shooter or a person who's, well, it's about the same family as the cinema vérité--just walk right into a group and you're part of it. People forget that there's nothing duller than a sequence in motion. It's the editing that makes the movies the great thing. Well, it has to be there to begin with.

Teiser: Have you seen a Warhol movie?

Adams: I haven't. [Laughter] I hear it's pretty wild.

Teiser: It must seem to go on for several days at a time.

Adams: Well, it's like pop art. For the lack of anything else to occupy their spirits, they get a can of Campbell's soup. Then they do a very bad picture, which some ordinary signboard artist would be ashamed of. And that gets six thousand dollars for a museum wall. [Laughter] I saw a pop art show in the East and I was aghast. It was the crudest, most ridiculous thing I've ever seen. I tried to figure it out. Really a can of Campbell's soup and not very well rendered! And huge, you know. Of course now they're painting pictures so big that galleries are being taxed to show them, let alone get them in the museum. Like five bands of varying shades of black. The other kind is when they start at the top with wet paint and let it dribble down, and let it come down out of the frame and out on the floor. I saw one painting that was done right in the museum, and that floor was part of the composition. As the paint dripped on the floor, it was all part of it. They call it the "mustique." [Laughter]

Teiser: Back to Group f/64--this one is a real review, I guess, as reviews went. This is by a man named Julius Craven, writing in The Argonaut, December 2, 1932. Did you know him?

Adams: Oh yes, yes. He was pretty good.

Teiser: [Reading] "For the benefit of those who may be as ignorant of cameras and camera craft as we are, if there are any such, we may as well begin by explaining that 'Group f.64,' [sic] a group of

Teiser: photographers which is now exhibiting...takes its name from the smallest stop on a camera lens. When the f.64 stop is used in making an exposure, it's called 'stopping down' or 'sharp focusing.' And sharp focusing happens to be the vogue just now in 'artistic' photography...."

Adams: I think this is a point, if I may say it: The lens is sharp, if it's wide open, on the focal plane, but "stopping down" gives depth so you have "sharpness" on many planes. And the f/64 is the smallest stop on the conventional big twelve-inch lens. F/16 might be the smallest on a miniature lens and a process lens may be over f/200. So f/64 is a symbol--it means depth more than sharpness. (Pardon me for interjecting this, but these are relevant ideas.)

Teiser: But by 1932 was it a "vogue" in artistic photography, as he says?

Adams: No, I think what he was saying there was that we were daring to enter the domain of the arts.

Teiser: [Reading] "The membership of the group is comprised of..." (and lists them all). "You might say that these are the master-photographers of California. However, their current exhibition includes prints by an additional (invited) group of four, namely, Preston Holder, Consuela [Consuelo] Kanaga, Alma Lavenson, and Brett Weston. And this group might also be called master-photographers. Anyway, be that as it may, together they are offering an excellent exhibition of photographs.

"Photography is one of the few crafts that has advanced during the machine age. This may be partly due to some of the inventions pertaining to it. But it is probably largely because photography has come to be recognized as being closely akin to, if not actually to overlap conventional creative art. The pictorial photographer of today must be a capable artist (culturally, instinctively, mentally), as well as a highly trained technician. He is not only the man behind the camera, but the brains inside it, as well."

Adams: "Pictorial" equals amateur, weak P.S.A. stuff!

Teiser: [Reading] "There are many outstandingly beautiful prints in the show." Shall I read you some of the ones he mentions?

Adams: Yes, fine. I think that's pretty good what he said, for the times. With no knowledge of photography, no exposure to photography, that's very good comment.

Teiser: [Reading] "There are many outstandingly beautiful prints in the show."

Teiser: Imogen Cunningham's studies of plant forms; Ansel Adams's fine studies of Piazzoni at work on his murals for the Public Library; Cunsuelo Kanaga's four exceptionally fine portrait studies of negros [sic]; one of which we think we recognize as being Kenneth Spencer;..." Was it?

Adams: Could have been, could have been. Yes, I think it was.

Teiser: [Reading] "...Willard Van Dyke's 'Plant Form'; Sonia Noskowiak's 'Palm Blossom'; Edward and Brett Weston's many fine studies of form and design. Such a collection of prints makes us feel that, had we time or money, or both, we would add photography to our list of favorite hobbies. But we also know enough about it to realize that photography is hard labor in one of its most drastic forms, and not a mere pastime to play at." [Laughter]

Adams: Yes. Being a hobbyist. Unfortunately, there are many people who can afford to be. That's why so many bad things are done.

Teiser: By the wealthy hobbyists?

Adams: The wealthy hobbyists. They might as well play golf or have a polo horse or a motorboat. But there's something entrancing about the whole photographic setup, the cameras, the lenses, the equipment. It's just unbelievable now, and the precision and quality's unbelievable. It's one thing that's gone up. Cars might go down, but I don't think there's ever been a reason for Ralph Nader to investigate photographic equipment performance. [Laughs] And sometimes it's miraculous what they do in the price range, although prices are up.

Meters, Lenses and Film Speeds

Adams: We have exposure meters--we make demands. Well, a really dependable meter would cost a thousand dollars, and they cost a little over a hundred, because they make them in quantity. They're still not really accurate. I have an English photometer that costs a little over two hundred dollars now, and it's still the most accurate photometer that the average person can get. I can think of other photometers that run up into thousands of dollars; they're really accurate through the full scale, consistent calibration.

Teiser: Are they portable?

Adams: No. They would be in a suitcase. [Laughs] The Leukeish meter would be in a small suitcase.

Adams: You always have that problem with the cameras. Now these precision cameras are really made to tolerances that are unbelievable--one hundredth of a millimeter, thousandth of a millimeter. I mean they've really done beautifully, and I don't imagine we ever can significantly improve on the lenses which we now have.

Teiser: Did the first lenses you used have qualities however that, say, coated lenses now don't have?

Adams: Well, there were very fine lenses made then, but they weren't consistent; they weren't very spectacular in their performance and their coverage. For instance, I doubt if you could get something like a Super-Angulon wide-angle lens today without benefit of a computer. I mean, the design is so complex. The perfect flat field; a five-inch lens that will cover an eight by ten plate, on axis they call it. And it's beautiful. To figure that just by arithmetic would be highly improbable. We used lenses like the Dagor and the Cooke and the Zeiss Protar, which were very fine lenses. Some were convertible; you could use different elements separately or together. They gave beautiful images and why nobody exactly knows. There was some aberration, but it didn't destroy the visual resolution, which was quite high.

The theory of the coated lens is very intricate, and people don't understand what happens. But every air-glass surface--that is, surface of glass to air--reflects about 4 percent of the light falling on it. If you have a four air-glass element lens, like a Dagor, you get about 80-plus percent transmission of light; the rest of it's scattered. But some of that scatter produces a flare over the image--a very low-impact flare of light. The bad lenses are the ones that give you a flare in the middle, which is a real flare. But the average uncoated lens like a Protar would just give you a soft shadow. It would add a couple of units of exposure, and that would give you a very smooth image, and the Cooke lenses, which were eight air-glass, would give you a very soft image for that reason. You would get almost what we would call today pre-exposure. In black and white, that's an advantage. Every black and white photographer should have at least one uncoated lens, a six or eight air-glass, because it would solve a lot of contrast problems.

When you get into color, you have a different thing, because flare then takes on the dominant color of the subject, so that if you're photographing a landscape with much blue sky, you would get a blue cast. If you're photographing trees, you would get a green cast. The flare would convey the dominant hue or color of the scene. So that's why coated lenses are very important now with color.

And then, if you look at a lens which is coated, you'll see a purple or yellowish cast. If you see a yellow coating, that means

Adams: it's transmitting more blue; if you see a purplish-blue cast, that means it's transmitting more yellow. You used to get lenses that would be coated different ways; so a 35 mm. camera might not give you the same color balance with different lenses. All the lenses of one make are all coated the same--so much blue, so much yellow, or purple. They have new systems called "supercoats," and they're getting down to an absolute minimum of flare. So your color purity is superior now to what it's ever been--better than you ever could get it before. I know in the old days people always said, "We'll have to use a lens composed of as few elements as possible."
[Interruption for phone call]

As for the f/64 group, I don't think any of us had a coated lens at that time. I think I tried one a few years later. And it's interesting for a photographer to study the quality of his earlier work. Because in earlier black and white, there's always a longer, richer scale than there is in many contemporary pictures. Because we've lost two to four exposing units at the bottom of our curve, because we have done away with "flare." We get the true luminous range, and that makes for deep shadow values. You see many pictures, especially with miniature cameras, where the shadows look very empty--lifeless, dead, no density. But part of that is due to the fact that there's absolutely no support of the shadows, which you would get if you had some flare.

Whereas in color without flare you'd be unhappy. I took a color picture of Edward Weston sitting by his brick chimney, and everything went red because the brick was in sun, and this caused a red flare. In the modern lens you might get only a whisper of red, but you wouldn't get that all-over reddish cast.

But I don't think any of the f/64 people had anything like that. The Leitz people, and Zeiss, I think, put out an f/1.5 lens with lens coating, but it was greenish and it was terrible for color. Then the Polarizer came in. Before Land invented Polaroid there were several very crude ways of making polarizing filters. And one was a deposition of sheep urine crystals on glass or plastic. Now, of all the animals in the world, the sheep urine condenses into long crystals like a picket fence, and these could be aligned. So the light that is vibrating this way (vertical) goes through the fence; the light that goes that way (horizontal) doesn't!

It also had a color effect. And then Land invented a way to manufacture a plastic film with polarizing crystals, which is colorless, or practically so. It is one of the great technical achievements of our time. When you look at what that man has accomplished in various fields, it almost scares you.

We take Polaroid glasses now for granted. You buy 3-D viewers for five cents and all such stuff. It's all a matter of making a

Adams: plastic--hundreds of miles of it, in big sheets--in which the Polaroid crystals are all aligned. Theoretically, it's extremely complex. Now you just push a button and this machine does it. [Laughs] So, at any rate, we didn't have that aid until quite a bit later.

Then the polarizers came in, and were gratefully received. I can't remember the dates of introduction of these things, but I would say that most of the f/64 people were using pretty basic equipment--uncoated lenses, films of the type of Isopan, or Kodak Superanchromatic. The speeds were around ASA 64, plus or minus. Many went down to 24 and lower than that.

Teiser: Were you using ASA speeds then?

Adams: No, we used Weston speeds, and there were the Scheiner and DIN speeds, all of which are logical arithmetical systems.

The first Weston light meter was designed to help out the photographer and avoid his making under-exposures, so they added what they called a "K" factor--and they used first the number 50, which should have been 64. It mathematically worked out as ASA 64. But they took one more number just for safety. Finally they found that people were over-exposing, so they used ASA 64. Fifty is the first step below. You see, all these numbers--you go from 32 to 40 to 50 to 64, etc. Everything goes up on the log to base 10 number, which is 0, .1, .2, .3, (which is two times), .4, .5, .6 (which is four times), .7, .8, .9 (which is eight times), and so on. So all the lens stops and ASA numbers progress "three." Every time they double, like 64 to 125, you have two log 10 steps. It's up to the manufacturer to decide the calibration he wants. Most of the built-in meters in the cameras are not accurate, very strangely calibrated--the ones I've come across. But they may be beautiful pieces of electronic gadgetry. You have to make personal adjustments to a complex world!

Brigman, Van Dyke, Edwards, and Cunningham

Adams: But that's getting off the f/64. You want more of that.

Teiser: All of the people in that group really are of interest. Let me read down a list of those who exhibited.

The first one was not a member of the group, but I think she was a photographer, and I think Imogen Cunningham said that the group first met in her studio although she herself--Ann Brigman--wasn't there.

Adams: Ann Brigman, yes. She was the only photographer from the West that Stieglitz liked. He felt that she had a perception that was very unusual. Her work was primarily soft focus, and a great deal of it was entwining nudes with Sierra junipers. Some very effective, almost art nouveau feeling. But it was very thoughtful and very well done. I don't remember many more things than her fantasies of the juniper--the tree shapes, and then the nudes relating thereto, in sunlight.

Teiser: Was she a professional photographer?

Adams: Yes. I think she did portraits. I don't know too much about her. I only met her once. But she was quite a considerable person and went right along with the Stieglitz tradition of trying to see things photographically, although the definition was goofy most of the time.

You see, they were still afraid of sharp things, and our f/64, really a visual manifesto, was to come back to the sharpness--the microscopic revelation of the lens--and as it's perfectly gorgeous, why hide it?

Teiser: You've spoken of Willard Van Dyke. Can you discuss him a little further?

Adams: Well, he was a very vital young man; he had a great imagination and was a great friend of Edward Weston. He did some very fine stills. (In fact, he had a fine show of his still photography a little while ago--very unexpected!) After the f/64 experiences he decided he had reached the limit of what he could do in still black and white, and he thought, "It's the movies for me now. I'm going to go into cinema productions," and he went to New York and became a very successful and important documentary photographer in the film world.

He went east, and I'm not sure of this, but I think at first he made a small living by doing stills. He had a remarkable darkroom in a closet. You know New York and the limit of space. He put shelves in it, so he'd stand on a stepladder and have developer on the top shelf, the short stop on the second shelf and the fixing bath on the third shelf, and then down to the water tub--and then he'd take the negative or print out to the bathtub and wash them. [Laughs] That's more or less official. Anyway, he did make a big success in the documentary world. I think he was very close to [Robert J.] Flaherty and Pare Lorenz and others of that group. There's probably many associates I don't know of.

And then, after a rewarding career, he had the opportunity to take over the department of moving pictures--of film--at the Museum of Modern Art, which is a tribute to his qualities.

Teiser: His career just went right along?

Adams: It went along very famously and very favorably. He's a fine person.

Teiser: He started making a living by running a gas station--was that it?

Adams: Yes, he was running a gas station over in Piedmont, and a museum director saw him one day, and he said, "Well, so this is what you do when you're not in the darkroom. I call it a matter of pump and circumstance," which is a great pun! [Laughter]

I haven't seen him very much. We're very fond of each other. He says I'm the only "square" he loves. [Laughter] Well, you can call me an oddball for some things. [Laughter] Anyway, I know he's doing fine.

Teiser: Then, on my list, there's you and Edward Weston and John Paul Edwards.

Adams: John Paul Edwards--I think he was a businessman. As far as I can remember, he was not a professional photographer. He was an ardent amateur. And his daughter, Mary Jeanette Edwards, was a great flame of Van Dyke's before he left for the East. They ran the little studio together on Brockhurst Street in Oakland. And then something happened--

Teiser: But John Paul Edwards was an accomplished photographer--enough for you to admit him to your group?

Adams: There's some question, actually, if you wanted to be very cold-blooded about it, whether he was good enough, but we had no established standards. I think today a couple of members would have been eliminated on the basis of standards or accomplishment--for no other reasons. I don't think he did enough really good work, but he was so sympathetic! And every organization has valuable enthusiasts that may not be up to the top level of some of the other people, but still are very important because they get things done. It's very easy to be very snobbish in this. But we all accepted him. Which one do you have next on the list?

Teiser: Imogen Cunningham.

Adams: Oh well, she's a great figure. She's very important.

Teiser: What sort of photographs was she making at that time? She's done a variety of work.

Adams: It has always been multi-diverse, if you want to use the term. She's always covered a tremendous field. At that time she was doing portraits and flowers--details. She made platinum prints. I have quite a beautiful detail of a magnolia flower. But at that time, you

Adams: see, people's techniques weren't what they are today and chemical knowledge wasn't much either, and unfortunately many of the works of that period are fading, including mine. We didn't know about two hypo baths, for example, and we didn't know lots of important technical things.

Parmelian Prints

Adams: Many of my works before 1930 could very easily fade, and have!

Teiser: Oh, is that right?

Adams: The portfolio show they had at the Stanford Museum,* the *Parmelian Prints*--fortunately it was a very good set. Only one or two had begun to turn slightly.

Teiser: What does the word "Parmelian" mean?

Adams: Nothing. The publisher didn't want to use the word "photograph," so she concocted this little kind of a bastard combination of Greek terms from black--"melios." I don't even think that is an accurate use of the term, but she liked it, so it was used.

Of course, it's a trick, because not meaning anything, people remember it. [Laughter] But as she wouldn't use the word "photograph" there had to be some other name. People were so scared of photography.

Teiser: She was Jean Chambers Moore. Who was she? How did she happen to be brought into it?

Adams: She was a lady in the book world, a friend of Albert Bender's. He told her that he was going to subsidize this; would she publish it? We didn't realize then that we could have done it ourselves--a thing as small as that. But she did handle it. She received the checks and deposited them and took a percentage--that's about all she did. [Laughter] She was all right, but timid, you see; wouldn't say "photographs." And I was very severely criticized for that. I should have stood by my guns, but I said, "Well, my guns would have been spiked immediately because if I'd insisted on 'photographs' she wouldn't have done it." You see, that's forty-five years ago.

Teiser: Do you remember Joseph Le Conte's review of that in the Sierra Club Bulletin?

*The exhibit of this 1927 portfolio of photographs by Ansel Adams opened on February 20, 1972.

Adams: No, I don't.

Teiser: Eighteen prints [reading] "of exquisite composition, each as technically perfect as it is possible to be produced."

Adams: Oh.

Teiser: [Reading] "The fact that they are the handiwork of Ansel Adams is sufficient to guarantee their artistic perfection to members of our club."

He thought the most remarkable was Mount Brewer. It was over six miles away, he wrote, and it was taken with a "telephotographic lens." [Reading] "The artist has attempted, and with great success, to suggest the scenery of the Sierra Nevada in a more pictorial sense than by a literal representation. By keeping to a simple and rather austere style, the prints assume a dignity and beauty which is not generally conveyed by photography."

Adams: Well, that's nice. [Laughs]

He was a very broad man. It's important to realize that a man of that degree of culture and understanding was interested in the mountains. He did thousands of pictures, and I printed many of them, as records of his travels in the Sierra. They were completely uninspired but perfectly honest photographs. Other people couldn't tell the difference between his approach and my approach, but he was sensitive enough to realize that I was trying to add something. I thought that was a very generous thing, because I definitely was adding a point of view, where he was interested in the scientific and the factual.

Teiser: By then had you been with him in the mountains?

Adams: Oh yes, I'd go out on trips with the family.

Teiser: So he'd watched you take pictures.

Adams: Oh yes. And I watched him! He was a wonderful little man and a dear friend. In fact, there's a book coming out now--his journal. I forget the name of the publisher.

Teiser: Lewis Osborne.

Adams: Yes, Osborne. I wrote the preface for that.* He asked me questions I couldn't remember.

*Joseph N. LeConte, A Summer of Travel in the High Sierra. Ashland, Oregon: Lewis Osborne, 1972.

Noskowiak, Weston, Swift, Holder, Kanaga, and Lavenson

Teiser: Well, back to f/64. Sonia Noskowiak.

Adams: She was a very nice gal. A great friend of Edward Weston's. They lived together for quite a while. And of course, like most of the people who worked with Edward, she was deeply influenced in seeing and technique. I think she's still living.

I think she didn't have as much force as some of the others. She was so dominated by Edward, she just--grabbed the style without the substance. But I have seen some very excellent pictures that she did when she was more herself. She was a lovable person in many ways.

You see, the instrument that was used in the classic sense was the eight by ten camera, and the contact print--the eight-ten format religiously adhered to. Everything squeezed into eight by ten, not seven by ten, but eight by ten, and of course nature isn't exactly built that way. Sometimes it becomes difficult to get something that really is a $6 \frac{2}{3}$ by 10 proportion in the world and then try to make it eight by ten. You know, it's like buying canvasses 20 by 34 and filling them, which of course you can do as a painter because you can "adjust." But I have a terrible time when people say, "I want a 20 by 24 'print' of a subject." Well, that's a category; and I try to bring one dimension, if the photograph is a vertical, to 20 inches. I try to make one dimension as large as I can. And then it might be 36 or 30 or 26 [in the other dimension]. So they say, "It's not 20 by 24," and I try to explain that this is a category and not based on square inches. I think it's Moulin in San Francisco that charges for photo murals by the square inch, which to me is one of the funniest things in the world, because paper comes in a roll. And what do you do with the little stuff you trim off? Like I made eight prints the other day in the so-called 20 by 24 category. (It was actually fifteen--there were some in the ashcan, and two more went today, so I have six left.) Well, the cost of the paper's so minor compared to the work!

I suppose it's a very small amount per square inch, you know, so it looks good, and nobody's going to sit down and figure it all out. If it were one cent a square inch, it would be \$1.44 a square foot, you see. And if it was three by five feet it would be about \$22.50! But the price might be seven hundred dollars! I've had a man who was so captious about it that I sent him a check for \$1.18, which was the differential cost of the paper. [Laughter] As close as I could figure.

Adams: Anyway, let's get back to f/64. I don't know too much about Noskowiak. I don't know where she is. I'd like to follow through; I was very fond of her. She was the subject of many of Edward's nudes, in what they call (it's not delicate to say it, but) the "scrawny" period. I mean, she was rather lean and posed in very vigorous attitudes. And I called those pictures "morguesque," because they were printed rather gray, and they didn't have that wonderful luminance of what he did with Tina Modotti and others in platinum.

There's something about the photographic print, the pure black image, that can be very cold, and I'm trying to break away from that with subtle selenium tones. It makes quite an emotional difference. Maybe a little four by five print that is just blue-black; it's a little frigid and when it relates to a nude...It might be all right for a rock, but it's all a matter of complex taste.

Well!

Teiser: Henry Swift.

Adams: Henry Swift was a businessman and founded Henry F. Swift & Company, a big bond house--stocks and bonds. It's still going. And Florence Swift was a painter. They were very charming people. And he was full of vim and vigor, and did a lot of experimental work, but the thing that got him into the Group f/64 was the series of pictures he did of mathematical models at the University. They had made models of equations--three-dimensional equations--in plaster, sometimes outlined with string and glass. And he photographed these, and they're extremely beautiful--extremely beautiful.

Teiser: Perhaps that was what one of the exhibition reviewers mentioned as abstract.

Adams: Yes. Now, here's an interesting thing: there's nothing more abstract than a three-dimensional mathematical model, but he makes a photograph of it, it's still a photograph of the model. So you see it would give a superficial impression of being a photographic abstraction.

Well, I don't know what else Swift did. I think he tried some things like mud cracks--a few things. But he was really quite a nice person. I think he left photography rather early. He also had some money and helped us out with some of our material expenses, although we got by with this whole thing at a very low cost--an amazingly low outlay. Everybody did their own work, and we chipped in on the announcements. It's an ideal system--but scary at times!

Adams: What's the next thing you have?

Teiser: Well, there were the four people who exhibited with you. Preston Holder.

Adams: I've not seen Preston Holder, and I don't know what he's doing, but he was pretty good. I don't remember his being outstanding, but he was terribly sincere. I think we really got these people on the basis of their sincerity. They all were really tied up with the work, and loved it.

Teiser: He didn't go on to become a professional photographer?

Adams: Not that I know of, no.

Teiser: Consuelo Kanaga.

Adams: They all called her "Connie." She was very good. She was very imaginative, very romantic, did some beautiful portraits, was a little overshadowed by Dorothea Lange. Dorothea Lange never quite forgave us for not getting her in the group. She at that time was so pictorial and so fuzzy-wuzzy that it never occurred to us. And I really regretted it later after seeing more of her work. At that time it certainly should have been considered, but....

Harroun: Was she doing mostly portraits at that time?

Adams: She did portraits and worked with some Navajo Indians. Maynard Dixon, her husband, was deeply involved with the Indians and the Southwest. I think she and Consuelo were in competition, frankly. I think it was kind of a stylistic competition, as well as in the portrait business.

Teiser: They were both in the same immediate field?

Adams: Yes.

Teiser: Alma Lavenson.

Adams: Well, she lived in Piedmont, and she was, I think you would say, kind of the Julia Margaret Cameron of Berkeley. I mean, she tried very hard--[laughter]. That's a cruel statement.

Teiser: It gives the idea.

Adams: I assumed that she had means and she could do what she wanted. And then she married a nice man named Wahrhaftig--but that was quite late, and I think he's dead now. But she did pictures of the Mother Lode country which were really quite superior. As I say, I don't

Adams: know about her business status or whether she just lived on what she had or whether she did any professional work.

Brett Weston and Edward Weston

Teiser: Then Brett Weston was the last one. What sort of photographs was he making then?

Adams: He was relatively young, and he was very much under the domination of his father. So he was influenced technically and visually by his father's work. Not imitating him, you understand what I mean, because Brett was always a strong individual. And Brett steadily progressed to become one of the very best of the "younger" photographers, but he's sixty-something now. And his latest work with the 2 1/4 by 2 1/4 format is simply superb. He is now secure in his own expressive domain. But the domination of the old man was not intentional and Edward didn't like it, but there it was. I, in fact, was probably one of the very few that were not dominated by Edward. I mean I used much of the same equipment and materials, but I always saw things very differently.

Teiser: Mrs. Newhall writes in her book that the first time you met Edward Weston you didn't like his work particularly. Is this true?

Adams: Yes, it's true. I didn't react. It was--well, you have to get a little perspective on Edward. Edward was a portrait photographer in Glendale who really went for the trade, as they say. I mean he did soft-focus pictures of ladies and shadows against the wall, and a peculiar quality of pictorialism that was sometimes quite goofy. And it bothered me because it seemed very mannered and very much "Hollywood," as I knew it. (You know, "Hollywood" is a term that covers a million different places at once.)

He was a very nice man, and I met him and the boys--I think two of them--at Albert Bender's. But he was just making the transition. And the prints, to me, were kind of chemically green--what they call commercial paper color. You still get that color; I have to use selenium to overcome it. And I felt there was a kind of a sterility about it, and I fought it for several years. And then after I saw Strand's negatives and realized what straight photography could be, I gradually came to realize more and more what Edward was trying to do. Edward had made vast steps forward in those several years. He was more generous to me than I was to him in the beginning, by far. I finally realized that some of this work was really what we're all after in our own way. So about 1931 or '30 we became very close friends, and at the time of his death we were very close, I think

Adams: really close in understanding and sympathy. He never depended on anybody--he wasn't that kind of a man. I guess I would be one of the few people he was glad to have around when he needed them. It's a feeling. He was very individualistic, and absolutely honest, and he flagellated himself in his living. He wouldn't compromise one bit. He used to say that doing a photograph on a commission is kind of prostitution. And I said, "What about the portraits?" "Well," he said, "that's just dating," and he used to laugh. [Laughs]

But in the depths of the Depression, Albert Bender was keeping all his friends going; he got a job for Edward from the MJB coffee people, the Branstens. They were really very wonderful and generous people--one of these really great San Francisco Jewish families, you know. I doubt if there's ever been anything like the families. There were a dozen of them, and they were the most generous and outgoing and intelligent people I have ever known. And they said, "Well, of course we'll give him a job. We have wanted quality pictures. Just have advertisements of a beautiful white china cup of coffee (and set), and just say, 'Photograph by Edward Weston for MJB'." This is called an institutional ad, you see. And they had this beautiful set of English china--pure white. So they got that to the studio and all the coffee he could make. All he had to do was to create compositions. It was entirely up to him. There was no restriction and no "copy" with it.

He worked on that thing for two or three weeks and finally he called them up and said, "I can't do it. It doesn't mean anything to me." It's a very interesting thing, because the professional photographer, you see, lives like an architect, on his clients. I mean, you want to build a house, well, I build the house for you. I try to keep my standards, but still I try to figure out what you need. But Edward just couldn't do that. To him, putting a beautiful piece of porcelain and arranging it any way he wanted, and putting coffee in it black--you know, typical, wonderful for his work--he couldn't do it.

And they all understood! They understood perfectly. He'd done six or seven for them, and they said, "Well, we'll buy these whether we use them or not, and we understand perfectly. You've been perfectly honest." That was quite an event, and a credit to the Branstens.

He did a series of pictures for the publication of Leaves of Grass--Random House. And he also did some pictures of the West for the Automobile Club of Southern California. But that was still his work. They were buying his creative work. They weren't giving him an external assignment.

Adams: Brett has always more or less carried that theory out. It's fine if it's what he wants to do as an easel painter, without any strictures--if they can use it.

I think that's a great idea, too. You have to make a living, though. You can adjust. In fact, I told Brett, "Well, after all, Michelangelo painted the popes." "Well," Brett said, "that's not the way I would do it."

You come across all kinds of confusions and strange personal quirks in this photographic world. Stieglitz never did any commissions; Strand never did, except for some social movements. [Eliot] Porter has never done anything for professional commercial assignment, to my knowledge; he writes his own assignments. He can afford to.

Applied Photography

Adams: I've done everything from morgue photography and surgical photography [laughs] to commercial advertisements and architecture.

Teiser: You've done surgical photography?

Adams: Yes, I've done quite a lot of surgical photography. Very interesting.

Teiser: I should think so.

Adams: Not creative. It's a sheer absolute--it has to be good, you know--clear. And I did some movies once; it was quite an experience. Very poor stuff.

[End Tape 5, Side 1]

[Begin Tape 5, Side 2]

Adams: Well, I'm a peculiar mixture, and one of the few I know of that combined the professional life with the creative life. That would be a very important thing, I think, in the future, to find out how many people would do that. The only reason I got by with it was that I had some wonderful breaks and great clients.

I did many catalogues for the [San Francisco] museums, pictures of paintings and sculptures, and I did, oh, a lot of architectural work. I think one of my biggest projects was the series of photographs of Maurice Sterne's murals in the Department of Justice, which were produced as original prints. We made quite a few portfolios of these. Then Albert Bender had acquired a very handsome set

Adams: of Chinese carvings--marbles--and we did limited editions of that. And, as I say, I'd have an advertising job and an architectural job, and I'd have a surgery job, and a portrait now and then.

I think the worst surgical job I had I was on the platform, very high. And operating rooms get very hot, and I was not bothered at all by the operation; this was one of these breast resections with an electric knife. Well, the combination of the anesthetic [laughter] and the heat, and the peculiar smoky effluvia of burning epidermis! And here I was up there--it must have been ninety-something degrees, hanging over this tripod. And that's the only time I really had trouble, because I just needed oxygen, you know. [Laughs]

Then, during the War, my last days in Los Angeles at Art Center School, we had a small group who went and worked with the Civil Defense group, and one of the problems was the hypothetical identification of corpses, should there be an attack. How do you identify them? So I worked out a system using a mirror. And we'd make a photograph of the victim, but he'd be in a mirror so you would get the full face as well as the profile. Now the full face, then, had to be and could be easily reversed in the enlargement. We would go over to the Los Angeles morgue and make these photographs.

Oh, they got into all kinds of situations. I remember one time they wheeled this old character out--he was a drunk, he may have passed out for good. They lifted him off the table, threw him on the floor and gave him a kick with the foot and said, "Now this is probably the way it looks after a bomb attack." So after you got over that, you figure out, "Well, here he is. The figure's lying there, and how do you get the camera in and what focal length lens, and what adjustments to get his profile, and what lighting?" That information could be very valuable, even if very morbid!

My last session there was through at ten-thirty p.m. and I had my car all loaded up and I drove right up to Edward Weston's in Carmel, and got there in the late morning and was absolutely exhausted. And, oh boy, I still smelled of formaldehyde! Edward says, "Whew, where you been, Lazarus?" [Laughter] Funny. So he made a photograph of me. (I now have a beard.) I was looking very weird, very tired, but then I was through with Los Angeles, thank goodness--and then I went on to Manzanar.

Giving Photography Museum Status

Adams: Well, now, how about the--any other names to consider there?

Teiser: Those were all the names I had in connection with f/64. Were there other people who also exhibited with you in later periods?

Adams: No. But what I wanted to say--I think I may have mentioned it before--was the fact that we existed only for a short time.

Teiser: You mentioned that you made a manifesto. Was it published anywhere?

Adams: I think it was published in a magazine somewhere, or on the museum wall. That's where it really was. But Weston had decided that we could very easily create a cult or be typed, you see, by continuing this--this f/64--into a continuing thing. So we voted to disband, and in one sense it's one of the most healthy things you can imagine in not perpetuating a cult or an idea or an association, because all of us could have been very easily tied in then with a "school"--you know what I mean. Edward Weston school, West Coast school.

Now we still are in that mess, but it's not intentional. So many of us are criticized as being just a continuation of this old "West Coast" school. Well, of course, nothing could be further from the truth, see. Our Friends of Photography has covered many, many facets of photography--the most contemporary back to historic. It's surprising anyone should get labeled these days, but they do.

Teiser: Well, this was one of the other things I was interested in about Group f/64, that it has had such a very long-lasting effect.

Adams: It had a tremendous impact. There was no plan to have an impact. Well, I guess we thought we would help, but I mean, we had no idea at all what would happen. And within that year it influenced the whole course of American photography.

Teiser: Do you think it was in any way what they call an idea whose time had come?

Adams: Yes, I think absolutely it was that. It was a group of young people, and they weren't radical activists as you have today. They didn't spend their time figuring out ways of doing things. They figured out more the doing of them. And it was this problem of being dedicated to the idea.

The idea of closing f/64 off, very short duration, was the healthiest thing we could do, because we weren't any kind of a formal organization. We had no offices, we had no board, we weren't "founded." We were just a very informal group. And Willard [Van Dyke] and I, I guess, were the ones who did most of the activating and planning of things. There were others who did much too. But there's always a few that take, you know, more credit than effort.

Harroun: What part did Edward Weston play? Was he really interested in it or--?

Adams: He contributed. He didn't do much to the concept--he just agreed and contributed. Most of us did that. But there was always somebody who had to do the telephoning and sending out the cards.

Teiser: Who actually chose the prints for the exhibit?

Adams: That was the group. We sent out cards to all the members. I think Willard did it or I did it or we both did it, I forget. Willard did more than I did. We said we have an opportunity for a show, and now we'll all meet when we can, and gave some dates. And they all met over at Brockhurst or at my place. I think we met twice. And we picked out a set of pictures for the show and then the director--his name was [Lloyd] Rollins--a very sympathetic, wonderful guy--he helped us design the show. And he threw out the baddies and kept in the goodies. You know it's always very important to have an objective analysis from the outside. In other words, if I'm going to have a show I never would put it up myself. I might pick out a hundred pictures that I like and that I wanted up and then say, "Well now, we've got to get sixty out of these." Nancy Newhall did that big show in 1963. I was terribly upset because there were a few of my favorites that were not in it. And when the show was up I realized why they weren't in there--repetitive. She was absolutely right!

And the same with selecting portfolios. For Portfolio Five, which is ten prints, we had twenty potentials. And we'd just show them to people and talk and say, "Now what's your reaction?" And I would see their points of view, and I got it down to ten prints. And it was very good because of that, better than if I had just made the selection myself. Many photographers don't do that. They feel that they're the only ones that can judge their own work. But a lot of things are done on the emotion of the moment, and it's awfully hard for the artist to have an objective point of view.

In fact I'm thinking now of putting in Portfolio Six two pictures that were done in the twenties. They really have an impact. It took this long to find it out. [Laughs]

Teiser: Was Group f/64's a big show?

Adams: No, no. I think there were--oh my--seventy or eighty prints, in that area--maybe less.

Teiser: Rollins was interested in photography, was he?

Adams: He was. He was simply marvelous. If it hadn't been for Rollins, I don't think we could have ever gotten the show, ever got recognition. Because he was young and he was very much ahead of his time and very alive.

Teiser: It seems to me that as late as the fifties, the photographic magazines were complaining that museums didn't recognize photography. But we've been doing it in San Francisco for quite a long time.

Adams: Yes, I think we were one of the very first. Well, I won't say that--the Buffalo Institute of Art [the Albright Art Gallery] gave the Photo-Secession show [in 1910]. But there were very, very few shows. The Metropolitan had some prints. They still have some interest. I just got a letter the other day (relative to my forthcoming exhibit in April 1974) saying they'd like me to conform to their mount sizes because they have the frames for them. My god, they're spending \$25,000 on a show, and they're worried about a few lousy frames and mats, 14 1/4 by 19 1/2, or something. Throws the whole thing out of kilter. [Laughter] God! But I think I can get over that all right.

But things are institutionalized. And out here they were hung under glass and people had their own size mats, and we all had different size mats in mind. Your mat is part of your vision, I mean. But you go to the Metropolitan and other museums and you'll see little things this big, you know, in a 14 by 19 mat, I mean, because that goes into the frame. [Laughter]

One of the important things is that museums were scared. It's the art groups--painting and sculpture groups that scalped photography. They didn't want to confront these "new" people. Now you had that same thing in San Francisco, my beloved home city. The artists there have been very negative to photography. In fact to the point of--almost sometimes just wishing they could cancel things out. Due to Mr. Eldridge T. Spencer, when he became president of the Art Association,*after the War [World War II], he was able to promote a department of photography. There was great opposition from the "art" people, Art Association people, I should say. But he put it through, and I went out and got ten thousand dollars from the Columbia Foundation and we started. We had a wonderful department. He was happy and I was happy.** But whenever we tried to get a gallery to do something with our work, the painters were there first. Maybe the artists weren't really afraid of us. They were just jealous of time, space, and money.

And the majority of painters today, I think, look on photography as an intruder. Very few painters I know have any interest in it or any sympathy for it. We have more sympathy for them by a hundred times. I was asked to put on a show at the San Francisco Museum of Art in October 1973. It was supposed to be a very important show. And they put on a big song and dance about it. It was to be coincidental with the reopening of the museum--the whole museum is being redecorated, reorganized. I said, "Well now, I want a description of the gallery space so I can start thinking." They said, "Well, it's going to be in the corridor. The corridor's going to be improved." And I said, "Nuts to that," in not exactly the same

*The San Francisco Art Association.

**See also pp. 374-375 and other references to the California School of Fine Arts as indexed.

Adams: words. I said, "If I'm having an exhibit, I'm having a gallery or else." I was thinking about myself and photography. I mean, if this was, as they said, an important show, then it deserved a gallery. I wouldn't mind in the least having my pictures in a group thing in the corridor if they're going to bring out part of their collection and put it in the corridor. Well, that's all right. But when you have a show, an exhibit, and it's an important one, and it's an artist--somebody who's achieved a certain level of distinction, and that's what they tell you, and they want that, I don't want it in the corridor. I mean, it's just a matter of--I guess you'd call it principle.

Teiser: That's where they hang most of the photographs at the museum--

Adams: Yes. It's terrible--awful light. Well, they're fixing it up a little better, but they still don't know anything about light. They won't listen. I can give them a mathematical formula--so many foot candles, so many candles per square foot, environmental percentage, all of that has been worked out. It's baby talk. And yet I know the last diagram I saw of the gallery, the lights were no higher than here at home. There won't be enough light on it. "Well, double the lighting." "Well, we can't. The circuits won't stand it." "Well, double the circuits." "We haven't got the money." [Laughter] God!

So this whole proposition of struggling to get recognition for photography....I'll gladly put myself down for photography as a whole, and if all they had was a corridor and there wasn't anything else, well, that would be all right. I mean, you're often shown in terrible situations. But part of the f/64 objective was to give photography museum dignity. In other words, if it's good, it's good enough to show it in a museum. Painting, and etching, and lithography, and drawings and photography. The Metropolitan Museum now has a division called the Department of Prints and Photography in the Department of Art. Well, that's a step--they at least use the word.

Teiser: The first photographic prints in American photography, did they show in galleries early?

Adams: No. And I can't give you a detailed account, but I think the Photo-Secession show was the very first one to have a museum show. Now, Beaumont Newhall could tell you that; I can't. But there were damned few and far between. Not until Newhall became interested in photography at the Museum of Modern Art in the thirties and forties. San Francisco and the f/64 came first, and then the Museum of Modern Art had a series of photograph exhibits after that.

In 1933 I went to Yale and had a letter to Dean [Everett V.] Meeks. And Dean Meeks was a very charming, rotund gentleman, and he

Adams: looked at my pictures and said, "Why, remarkable, remarkable, remarkable!" And I had a print about this big [gesture]. He said, "That's one of the most beautiful things I've ever seen. What's it of?" I said, "Foliage at Mills College." He said, "You don't understand. What's it of--what tapestry?" And I said, "It's a photograph of nature." And he looked at me and he said, "Well, now, I don't--I just haven't made myself clear. What work of art is that a representation of? What did you do that of?" And I says, "I took it of a bunch of weeds!" [Laughs] I was just out of my mind! I mean I couldn't believe this man--I said, again, "These are all photographs not of paintings or drawings or anything, but they're photographs of nature." "Well, that's remarkable, you must show these."*

So I had a show at Yale in '34 or something. But here was the Dean of Fine Arts at Yale University who could not get through his head that all these photographs were not photographs of something else somebody had done on some graphic medium. He never thought of taking a camera and photographing a landscape or a detail of nature.

Camera Clubs, Groups, and Galleries

Teiser: This was part of the reason for all the camera club magazines perhaps. They didn't have anybody else to show the pictures to.

Adams: No, they didn't. The camera club is a very interesting thing. It's primarily a social get-together of people interested in a hobby. Most camera clubs have never made a pretense of art. The Photographic Society of America, of which I'm a Fellow (I don't know why), largely represents this approach to photography. They're absolutely divorced and separate from the creative stream. For instance, the admiral--awful nice man--Admiral [E.C.] Forsyth makes just beautiful pictures. He is a trustee of the Friends of Photography, and his pictures are really something. Just one little theme: light and sunset, light reflections on water, dark/light. He never does anything else, but he does it so well that I've got one of his prints that's a beautiful gem in my collection.

Well, he said it would be fine if we could have an article on the Friends in the journal of the Photographic Society of America. And we had the article, and there was no comment whatsoever. It's just the kind of photography that's--it's just another world. It's a sewing bee. They have a technical section which is ridiculous. Anyhow, it's entirely a world apart.

Then of course, with the advent of the Depression and the photo-documentarists, you had another world apart. We had the Photo League

*See also pp. 319-320.

Adams: and we had what is now known as the "concerned photographer." It's a very important term, and you have to take it for what it means. It really means photographers who are concerned with our environmental and social conditions. Now they're concerned with that, but that doesn't necessarily make it creative art. I'm concerned with something else too. I'm supposed to give a talk to them in the fall, and that's going to be my theme--that my concern is different from theirs. But it's just as deep concern, because I think it includes the whole thing. And of course I can go on and probably put myself out on a limb very quickly with it.

Bruce Davidson's East 100th Street, that book he did on the ghetto, is a very important thing, and some of the photographs he did are extraordinarily fine. But our group of photographers are interested, no matter what your subject is, in the photograph. I mean does it have an emotional wallop, aesthetic wallop, and is it "technically adequate"? It looks better if it has a theme, and I think that's one of the things that I've had to contend with. I've always had some kind of a theme, whether it's been conservation or Japanese-American relocation, etc. But the person today either works with a definitely social theme, of minority groups or the oppressed, or else with some absolutely internal, personal kind of experience, what we often call a "trip."

I think I mentioned the other day the photograph, 11 by 14 inches, of a lawn in which there was an out-of-focus dog in the middle of it, and that was hanging on a museum wall. Now that was a symbol of something to the photographer, but to the spectator, God knows! [Laughter]

Now there are groups in New York, like the Circle of Confusion--those people are largely technical. They sit around with drinks and dinner and yak, and they don't do much of any work. All over the country there are workshops beginning and unfortunately ending, because they just don't have the complete picture of the problem. But they are important because they bring people together in the creative sense.

The sad thing is the number of galleries that are starting up. Having had a gallery myself, I know whereof I speak. They have absolutely no concept of the work and the money involved in it. They have great enthusiasm to have a gallery. And they put in a gallery and lights and put out an announcement. But they don't realize that running a gallery takes a terrific amount of publicity--primarily an important list of artists who may be shown. You have to do that. You can't go out and just ask "Joe" to show, and just extoll "Joe the photographer."

Adams: New galleries are starting. Some of them are very well funded, with a tremendous amount of money. The Light Gallery in New York is typical. What I saw there was certainly of no consequence whatsoever. The Witkin Gallery is I think the best in the country, because Lee Witkin combines the books, the old stuff, the new stuff. It's a nonpretentious place. It's just a mixed up, beautiful, simple setup, with no obvious money involvement that you see. I know the rent costs him something and he has a nice deck for entertaining. The gallery itself is small, but he has a priceless treasure of photographs. He knows photography, knows how to get it, and puts on these exhibits without pretension. And he's doing very well.

But there was a gallery started in Chicago, called Limited Image Gallery, that started out with a big fanfare and had a big show of mine and others. And all the money they took in selling prints, which were not prints from the wall, but prints on order, they spent for the rent, the lights, and so forth, so they went bust. And I'm in the hole for three thousand dollars, and several other people I know are out. I'm the prime loser in the case because I had more prints. But they had absolutely no sense. They stuck labels to the back of the prints, which contracts the prints and shows on the surface. Well, they might be used for other exhibits, but you can't sell them. When you look at them in the light, you see the defect.

Liliane De Cock had mounted her color pictures on beautiful mats, and then they stuck overmats on them, and a label on the back in addition. And then one print was just scratched right across--the only one of its kind. She couldn't possibly make another one like it.

So here's a gallery that started up and they didn't even know the fundamentals of care of photographs, let alone operation of the gallery. And we have that now, all over the country--new galleries, new failures.

And quite a number of publications, which are not--well, Aperture is about the only one that survived. Friends of Photography, they're starting a quarterly.* I think that will be pretty good, because we have a good background. We don't have any money, but we're out on a big fund campaign now. We're a non-profit educational organization. We have the Ferguson Fund of twenty thousand dollars, which gives about fifteen hundred dollars a year to a creative photographer. It's been run not as a fly-by-night thing, but pretty solid, well planned.

*The initial issue of the quarterly, Untitled #1, was published in the autumn of 1972.

Adams: But here's photography, in which there's more millions expended per week than all of the old masters in the whole time of the Renaissance spent on canvas and paint--or frescoes. You know, it's just fantastic. But most of it is a diary. The Polaroid process is in one sense directed to the diarist. Instead of saying, "We went to Grandma's for Thanksgiving turkey," by gosh there are pictures and pictures and pictures of Grandma and the Thanksgiving turkey! This is very important. But they've also gone into the potential art field with their four by five, and very much into the "concerned photographer" field with the pictures that are made by photographers who want to record the scene.

Well, I'm sort of getting ahead of myself.

Teiser: Coming up to the present and going back to the past--that's fine.

I guess you've said what in general the over-all effect of the f/64 group was.

Adams: My only regret was that we didn't do one publication--one portfolio or one publication, because I think that might have had historic value, but on the other hand, it might have rigidized it a bit, too, you see.

Teiser: Rollins had also an exhibit of Moholy-Nagy. Do you remember that? Did that have any effect?

Adams: That was the first of them. Yes, but not as photography because most of his photographs were photograms. I think I've described what the photogram was.

Teiser: No one picked up any of that here?

Adams: Well, I won't say that. I think it's quite an illuminating thing. His photographs as prints were simply terrible. They were spotted, they were ugly, they were bad tones. But his concepts were very important. Moholy-Nagy was entirely interested in design and not substance--not the subject itself. So I think he did have a definite effect on this approach, and I think that people didn't forget it.

The Golden Gate International Exposition Exhibit

Adams: Of course, you have to say that the biggest photographic show was at the 1940 Fair [the Golden Gate International Exposition]. I think I told you about that.

Teiser: You haven't. We have the catalogue, A Pageant of Photography, and were going to ask you about it.

Adams: Yes, because that was very important in the sense that it was just big, and I griped and I griped and I griped because at the 1939 Fair there was no photography, and Tim [Timothy] Pfleuger--he was a great, really great man, a wonderful person--he called me up one day and he said, "Adams, we've got a little money. Would you like to run the photography department?" Well, I didn't have any money, but I said, "God, yes. Tell me about it." He said, "Well, in the Fine Arts building, we'll give you some galleries and we'll give you a secretary--she's a very attractive Italian girl who spells 'f' with a 'ph'." [Laughter] And he said, "We've got sixteen hundred dollars in addition to the secretary. It's all yours."

And I went over there, and there were these big rooms, and we painted them, and my God, they looked beautiful. The lighting was only fair, but I didn't worry about that. And I had the equivalent of thirty-seven large galleries of photographs. And I'm not a museum man at all. I had Weston, both Westons, and Moholy-Nagy, and Arnold Genthe, a big show of contemporary color photography, and the Photo League. And early western photography which, if you look back at, there's some extraordinary things in it. But it's gone now; you can't find them. They printed on leather--1868, something like that.* And I had the equivalent of the f/64, a group show.

Boy, that was an awful hard job, but it was a contribution, and that's what brought, for the first time, photography in many of its approaches, to the attention of the people in the West. Before that, nobody'd ever seen anything. I tried to get a show from Stieglitz and, you know, the old boy nearly did it. He said, "I'm sorely tempted," and I said, "God, Stieglitz, this is the chance to do something. I'll paint the gallery any way you say. We have guards; it'll be perfectly safe. And if you'd only--" Well, then he finally decided that he couldn't do it. If he did it, he'd have to send to other museums. He trusted me to take care of them, but he couldn't trust any of the museums to do it! He gave me all this fantastic negative monkey business, but still I was sorry I lost that. But I did have "The Steerage," a reproduction from Camera Work.

It was a very good show. It did bring to San Francisco, at least, an awareness of photography it had never had before.

*The exhibit included an 1861 photograph on leather of Brewer Camp near Monterey, photographer unknown.

Timing in Photography

Teiser: Who was it, incidentally, who did the ten billion studies of a cup and saucer? Edward Steichen?

Adams: That is apocryphal. [Laughter]

Teiser: I was thinking of that when you were talking about Weston taking the MJB photographs.

Adams: Any photo-scientist, technologist, even at that time, would have been able to figure out the reciprocity factor and would not have needed to make ten billion pictures of the cup and saucer. These stories, you know--like the one that I waited for three days to get this picture or that--I never waited! The only time I waited for anything in my life was on top of Kearsarge Pass, waiting for some clouds to go away from the Kearsarge Pinnacles, and they didn't. I waited all afternoon, and all the clouds kept moving right along the line. But we have to be very fair about that, because when we know what we're going to do, especially when we have assignments, then we have to wait. But my "Moonrise, Hernandez, New Mexico" picture was taken with the differential of only fifteen seconds. The Lone Pine sunrise ["Winter Sunrise, Sierra Nevada, from Lone Pine"]--I just was there at the right time. The "Grand Tetons and Snake River" was all within ten minutes.

Weston used to say, "If you wait here trying to see if something's going to happen, you're probably losing something wonderful over there." So he never waited. And I wouldn't unless I really knew something was to "happen."

I mean like one night we had a green flash coming up--the sun goes down against a sharp horizon, and there's a green-emerald momentary flash. And there was a ship coming, and I thought, "This could be one of the craziest things." And I got out the big camera with the very long lens, you see. The idea was that it would be perfectly marvelous if we could photograph the ship in front of the setting sun with the green flash. Well, it almost made it. If I'd been living a quarter of a mile down the coast, I would have gotten it. Then I figured out, well, so what? [Laughter] My lens wasn't really big enough--you have to have one of those huge mirror lenses. But, it was a pretty good green flash. Might even be one tonight. Ever seen a green flash?

Teiser: No. Mr. Spencer said you had a great interest in the green flash.

Adams: Well, the green flash is a very interesting phenomenon. It takes a knife-edge ocean line (there can't be any clouds) and as the sun descends, I guess you would say, the spectrum is sectorized. The blue

Adams: light is completely scattered, the red rays are refracted, and there's a beautiful emerald flash for about a tenth of a second-- it's very short--just pht! Like that. And it's a beautiful emerald. We've seen it here quite often. It has to be, as I say, a knife-edge sky, because if there's any diffusion or clouds you don't get it. We might get it tonight, but I don't know.

Teiser: I have another story that's probably apocryphal, but I'll ask you about it. This is about you, and someone told me that you were in the mountains in the summer, and you saw something that you thought you'd like to photograph in the snow. So the next winter you packed up all your equipment on an animal, and one glass plate, and went up into the mountains, took the picture, and came back. [Laughter]

Adams: I never did such a damned thing in my life! You can discount that one. [Laughter]

There is a story, however, about the Santa Fe Railroad. They had a terrible wreck at Durango in New Mexico, and they sent out their photographer from Chicago, who was just, you know, the railroad photographer. And he arrived on the train the next day, and he got out and walked up the hill and studied very carefully, and he took one picture and went back to Chicago. [Laughter] He said, "They told me to go out and get a picture, which I did." [Laughter]

No, these stories are really remarkable. They probably stem from the fact that the picture of Half Dome ["Monolith, the Face of Half Dome"] was taken when I only had two plates left; I had taken many plates that day, but I only had two plates left, and I did one exposure of Half Dome with an ordinary K-2 filter. And that was my first insight into visualization, because I suddenly realized what the image was going to be--the shadow of the cliff and the sky would be about the same in value; it would be dull, and it would not have anything at all of the romantic, really super-dramatic impact. And I had one more glass plate, and a very strong F filter, Wrattan F, and I put that on, and I made this picture--this big one--it's around the corner [on the studio wall]. I knew what was going to happen, and that's probably my first conscious visualization. But that was just because I'd packed this camera up through this God-awful snow; it was really very difficult getting there. I'd taken quite a few pictures, and how easy it would have been to have taken all the pictures before I got there, or made a few mistakes. See how chancey all this is.

I sat down on one of the best plates I ever made, in Yosemite. It was of Tenaya Canyon from above. I leaned these plates against a chair, you see, and then I moved over to fix something else, and then I sat down, and one of these plates had fallen down. Cra-aa-ck,

Adams: crunch. And here was this picture that I'd spent three hours climbing down a canyon--I took three pictures, two of them weren't any good, something happened. This one was a beautiful negative. I just ruined it, you know. [Laughter] So, I mean, it's not always apocryphal. Happens all the time.

Teiser: You know what you want, but you do take a number of exposures still, do you?

Adams: What I do: if I come across a very exciting thing which I know is a picture, especially if I'm taking film pack, I'll take at least two, three, or four. But they're all the same. I don't "bracket" my exposures. What's called "bracketing" is nothing but indecision. [Laughter] When I read my values, I like to know what my exposure is. Once in a while, you'll think of another interpretation and do it a different way, and give a different development on it. But the idea like Margaret Bourke-White had, of just setting up and going from f/45 to f/3.2, up and down the line, knowing that one would be a better exposure than the others....

Teiser: I have my usual list of many questions here, but would you like to stop for today?

Adams: I can go on some more. Let's finish the tape.

Teiser: All right.

Edwin Land and the Polaroid Camera System

Teiser: Perhaps you have something in mind that continues what we were talking about now. For instance, what about the Land camera and visualization?

Adams: This is a very important thing. I've always been interested in anything new in the mechanical aspect of things, and before 1950--'47 or '48--I met Edwin Land.

Teiser: How did you meet him?

Adams: I heard him at an Optical Society lecture when he presented the Polaroid camera process, which was an historic event, and then we went to Cambridge [Massachusetts] and came over to this little laboratory, and he took my picture with a great big eight by ten camera. The process was in eight by ten format in the laboratories. He sat me down under lights and things, and exposed the picture, processed it; there it was, brown and of rather awful quality. It

Adams: was his very first experimental work. But by gosh, it was a one-minute picture! And that excited me no end; I mean the thought that you could really do that.

So I told him that I was interested, that I felt that he had something absolutely unique--an historic step. So he said, "Well, I'd like you to be a consultant for the company (at one hundred dollars a month) and just send in your ideas." And so that's where it all started. I'm now up to memo 2078. It's considerably more than one hundred dollars a month, thank God. But out of all this came the idea. They progressed from the brown tone to a clean black and white image. That seemed necessary; it was a first step. Of course, by 1950, 1952, he had the whole future planned right up to now and beyond. The development of color, the new cameras; it was all written out, and many groups in laboratories were given assignments to develop. And nothing like this has been known before. It's fantastic.

At first I claimed that the thing against the print was the color, and that it should be black and white. I'm no real technician, but they would send out films, and I would take the camera out and try all kinds of experiments and then I'd send in my comments, and in good time came the black-and-white image.

And then I urged we should have something for the professional, meaning something he could use in the conventional view camera. If Polaroid was not going to make a view camera, they have to use what we've got. So we must have an individual "pack." Well, in Palo Alto [where Edwin Land spent some time], we used to walk up and down the street in the evenings. Land said, "Well, how many people would use it?" I said, "Oh, gosh, I can think of fifty right now." Slight exaggeration, but I believed it. [Laughs] I said, "I'm a professional and I can think of nothing more wonderful than getting a Polaroid print out of a view camera in the four by five category."

Well, today we have it, and you can see it on the wall [of the studio area, where prints are hung]. Some of those prints, a couple of them, at least, are very early ones, and the whole technique and the whole idea of the adapter and how it would work--the technique is all theirs, but I was just promoting the image quality. It's a very interesting thing: a person employed by Polaroid who works along all the time (this would apply to any company)--he's working with a film, say Type 52, and he knows what the film can do. Then he begins to look around for subjects that fit Type 52. Well, the whole thing becomes static, and a lot of beautiful pictures come in because there's nothing better for Type 52 than a foggy day in Point Lobos. But my job was, as a professional, to take it on certain assignments, real or contrived, and see where the film failed. That was the important thing.

Adams: Here's the thing that I, Ansel Adams, was requested to do by their advertising agency, and I do it, and the scale of the film isn't adequate. So in a sense I was responsible for the present four by five, by pleading and begging and support. And now it's approaching a twenty-million-dollar-a-year sale, just alone on the four by five. But the multi-million dollar thing is in the camera which is for the public, and all the four by five, black and white, color, and the experimental material--all this stuff couldn't exist without vast public sale of the popular products.

Teiser: What are the implications of the four by five? That you have a permanent negative?

Adams: You have several varieties. You have Type 1, which is a very high-contrast print which is used in the graphic arts, and is really quite remarkable because you can make screened images of it. You put an engraving screen in front of the negative and paste the resulting pictures right on a sheet with type, and re-photograph it for "offset" purposes. You can also do all kinds of fancy, really very interesting aesthetic experiments, because this has only a one to two-and-a-half step range. You can exaggerate textures. (You can do a texture image of that drab cloth, greatly exceeding its original contrast.) Type 52 is the standard high-speed film, 500 at least; they say 400, but my exposure trials usually give 500-plus. It has a limited exposure scale as does color, but it gives a beautiful print.

Then there's Type 57, which they call their 3000 film, which is for me 4000 ASA daylight, the fastest film that was ever made. It's extraordinary. Sitting in here, at dusk, the light would be almost too bright for it. But you can work at night with available light and get the feeling of environmental lighting. I've used some film up to 20,000 ASA, experimental film--fantastic stuff.

Then there's the Type 55 PN, which gives you both the negative print and the negative. It's quite remarkable; not fast. It's quite slow--about 50-64 ASA. Then there's the Type 58, which is Polacolor, four by five, and the pack film, Type 108. Then there's a new camera, the Aladdin (which is a temporary name--I guess they'll use it), which is totally different and absolutely remarkable.

Then they have a very high-speed film that they use for oscilloscope photography--around 10,000 ASA. And they have also a marvelous material, which people don't take advantage of as they should, called Type 47, which is one of the sharpest transparencies for slides. And you have ways of controlling contrast with this material.

Teiser: It's used in laboratories and industry.

Adams: I have a whole collection of slides in which photographs are projected on a screen with the standard lantern-style projector. It is remarkable. They tried it one time with a 2 1/4 by 2 1/4 projector, but it didn't get over, and it was too bad because the images were so sharp and so beautiful--such a great range to them.

Then they also have another material known as PolaLine 146-L which gives a very high contrast transparency. If you want to do a graph or a page of type, it would be perfect. Because of the particular chemistry and the physical system involved, this is the sharpest image available to date. The diffusion is within a very, very short angle.

I've always considered the Polaroid process as an intensely creative one, not only because of the inherent beauty of the material, which has, if you want to speak photo-scientifically, a linear scale and cannot be duplicated by any ordinary print. But it also has the element of immediacy. You see exactly what you're getting. When you're making a picture under static conditions, you can make an immediate correction. Or if you're working in fast situations, once you have one picture you know what the others are going to be.

There is a new aesthetics involved in this immediacy, and that's what I think is so important.

I'm talked out!

Harroun: Your photographs on the backs of Aperture--those are marvelous. They must have had--

Adams: Well, I'm responsible for a lot of those. Not my own, but other people trying to get good images with the process.

Teiser: Yours must have had a tremendous impact.

Adams: I was one of the first ones that used it. Yes, I guess I was the almost first one outside the company. Paul Caponigro and a few others used it, but I'm the one that totally believed in it.

And a typical instance--in a day or so I'm getting a new pack of film, something experimental--the Type 55, in which we think we've made a breakthrough. Well, it's so complex technically I couldn't begin to understand it, but I go out and make some pictures, and the breakthrough is valid if I get a good picture and a good negative. And does it have the scale, etc., required?

Teiser: It will have a negative?

Adams: This is the 55. It has the negative.*

[End Tape 5, Side 2]

[Interview V -- 20 May 1972]

[Begin Tape 6, Side 1]

Mortensen

Teiser: Let me ask you one more question that has to do, indirectly, with Group f/64. Why was William Mortensen considered so dreadful by you and the others?

Adams: Mortensen represented about the lowest ebb of pictorialism, a very literary approach through his titles, his mannerisms and techniques-- "abrasion tones" and matrix masks--oh, I can't think of the word-- it's things you print through that give the appearance of canvas-- it's texture screens! He was imitating some of the worst of the Romantic painting, and using Roman letters for inscriptions, and all kinds of manipulation. It just seemed to be as far from photography as possible. He still is very popular in some circles, but for us he was the anti-Christ. We stood for exactly the opposite of everything he represented.

The interesting thing is that he had a man named Paul--I don't know whether that's the first name or the last name--who helped him write or actually wrote the book Mortensen on the Negative, which has many very fine ideas in it. I was quite embarrassed later to find that he had anticipated some of my pet ideas of technique; controlled exposure and development of the negative, etc. (But not the Zone System developed around 1940.) The book is very good; it's just that the illustrations are such rather sad examples. A very interesting thing is that in all of the history of flagrant pictorialism, you don't find it has important museum recognition. The pictorialists call their exhibitions "salons." When I went to St. Louis about 1938, some of the museums might have such shows, but now I don't think they elect to touch it because the motive is "hobbyist." It's awfully hard to put your finger on it. You say it's bad taste and the answer is, "Who are you to say it's bad taste?" What is taste? What's good taste?

*Did not work out! [A.A.]

Adams: I don't have Mortensen's book here. I had it once; somebody stole it. But the illustrations were just over-retouched, over-modulated. He'd take these young nude models and grease them so they'd shine, you know. [Laughter] And they'd be in poses--

Teiser: Didn't he write a book on the print, too?

Adams: Yes. And Monsters and Madonnas was one book he wrote. [Laughter] Well, they were like a bad dream. They're still publishing portfolios of Mortensen's, printing from his negatives. I guess the P.S.A. Journal has been advertising them. I remember writing a letter in which I suggested he negotiate oblivion. My father persuaded me it wouldn't have the desired effect. The controversy was kind of silly.

But anyway, his work was the exact opposite of what f/64 stood for. He would have classes down at Laguna Beach, and wealthy capitalists from the East would come out and spend a thousand dollars, I was told, for a weekend. And after they'd returned home, all their work would look like his. I remember how these men would get together, say in Chicago, and they'd hire a model for the weekend. The model would be a platinum blond, usually wearing nothing but high-heeled shoes. You know, that kind of thing! [Laughter] All very decent, but all done with such conventional poses of holding a jar on their shoulder, etc., and they'd have names like "Dessa" or "The Girl with the Flaxen Hair." It was so obviously phony! All made-up and greased up. It was a way of getting highlights on nudes. In fact, some of the early photographers did this sometimes in portraits to accentuate the highlights on the face. And in the early days, they had to chalk the face, because the film wasn't sensitive to anything but blue light, so the face would come out over-dark. Anybody with a dark complexion or with freckles usually had to be well powdered. Any hand would show all kinds of spots. Anything that went to the pink, yellow or red and would go down in value. So a lot of the daguerrotypes were taken in rather strong, soft daylight, and probably powdered up a bit--like in television now. On television they have to powder my head so it won't shine and blow the tube. (That's what happened on the moon.)

Vision and Photography

Teiser: To take you back still further into the past, let me ask you if your motives, for your earliest photographs, were in effect the same as your motives for taking photographs now?

Adams: A motive is a subconscious thing; I wouldn't know how to answer that question. I think that in the earlier days, I was technically and aesthetically naive, so many of my early photographs have a much simpler and more direct statement, and all the ones that are the best are the ones that are motivated by "instant recognition" and then just doing them and having the technique to back it up. Which I didn't have in the earlier days, so I'd have many an exciting vision but zero results because I wouldn't know what to do. Now we know much more, but at the cost of a certain spontaneity, if that's the term you want to use. It's very hard to say this, but as you get experienced and you see a lot of work, in any art form, you can't help being influenced, and you automatically judge and check your reactions to your experience.

Today I went out trying to get this picture of this very marvelous old dead tree. It's looked the same for ten years, as if it's going to blow over. But the sky is usually blah--it's just nothing. Today there were some rather interesting clouds. I was setting up the camera (and there are only a few places you can do it for this subject) and I had to wait until those clouds behaved. See now, in the past I would have just seen a cloud and thought, "There's a cloud or a tree!" I wouldn't have seen the cloud-tree relationship so precisely. And when I met Strand, I found that was one of his basic themes--the marvelous, precise relationship of "this to that." Trying to get a moment when all the branches in this tree were in the cloud. If they were against blue sky they might be "lost." And you wait until things would be right. And a couple of times it was right.

In the 1920s I wouldn't have been in the least bit aware of such relationships. I can look back and see many photographic situations when I really missed the moment. The idea was there, but I didn't visualize that perfection of arrangement. Some photographers never have that facility; others have it to an extreme degree.

There's one wonderful photograph by Stieglitz at Lake George, the porch where the white turned post is seen adjacent to the window and window edge. There's a thirty-second of an inch hairline separating them. And it's this hairline that really suggests space and organization. You see, the spectator is convinced, or feels, or is aware of the fact that the photographer was aware of the relationship. And I have one, that I show in my slides, of a picture that was done with a Polaroid at the Rochester Institute of Technology of a building of the "Greek revival" period. Here these marvelous columns are seen in the near/far mode in exaggerated scale. In the first one I did, the curve of the near column broke into the rectangular pedestal of the column in the back, and I realized when I saw this in the Polaroid-Land print; I'd missed it in the ground glass. All I had to do was to move the lens a little bit to the right (two inches), which allowed it to see around the column. It

Adams: created a little "hairline" of separation which succeeded in maintaining the integrity of the curved shape. The foreground pillar wasn't lost in juxtaposition with the back shape; a "merger" was avoided.

Those things are hard to describe verbally. And of course when you do overlook one, then you try to justify it. You put a lot of what they call "phrases" into the equation to make it come out to zero. [Laughter] Then in about a year you may look at it, and you wonder, "Well how in the world did I ever get by with that?"

I'll see somebody's work for the first time, and that's the first thing you see--the disturbing mergers and distractions. You look at a print, and then you find your eyes going around to the spots and bad edges and all the funny things a photograph can contain. You can put your finger over one of them and say, "Well that's an interruption." They see the problem for the first time. I can go back and get some of my early work and do exactly the same thing--because I didn't see the defects to begin with.

More and more as you work, you try to visualize the image ahead of exposure. It's more difficult with the little cameras, but of course the "saving instrument" is the single-lens reflex, because there you really see the image--just what the lens is seeing.

Teiser: With the rangefinder camera, you partly guess at it?

Adams: The rangefinder or the viewfinder is not on lens axis. Now, if I'm a long ways off, the parallax effect doesn't make any difference. But if I'm sitting here with you and my eye is the lens, your hair line, for example, is just touching the fossil. If this "eye" would be the finder--it's usually off to the left--I'll compose you as the finder sees it. But my lens sees you cutting in one inch on that fossil behind you. So that the composition is not as anticipated. The old Rolleiflex has this kind of vertical offset--you have to raise the camera about two and a half inches to be sure the lens sees what the finder sees.

Teiser: Doesn't the Rolleiflex have a compensating mechanism?

Adams: Oh, the new one--the single-lens one--but not the double, the twin-lens design. What the twin-lens does is to tilt the viewer mechanism so that the plane focused on comes to the center of the field. But because the lens is taking the picture at a lower level, it can't take care of the parallax. You're only tilting the viewing lens. The distance of the lens from the subject determines the perspective. So with the Hasselblad single-lens (Superwide) I must raise the tripod three inches to get just what I see in the finder. I compose very accurately with the finder but must make this adjustment when working with near/far subjects. After composing, I just crank the camera up

Adams: exactly the difference in distance between the camera lens and the finder lens. Then the camera lens is seeing what the finder lens was seeing. I can show you a picture of that in my book, Camera and Lens, where there's quite a profound difference evident.

Flash Mishaps

Teiser: Back to your earliest photographs, you were speaking the other day of the fact that you've been able to maintain photography as a commercial project and practice it as an art at the same time. Do you remember the first photographs for which you were paid?

Adams: There's one very funny one that really is not of much consequence. My next-door neighbor taught at the Chinese school in Chinatown, and wanted a picture of her class. So, I had an old four by five camera (my first one) and a flash gun. You used to use flash powder--magnesium--very dangerous. You'd put a dynamite cap in this tray, and you'd pull down the tension cord, and you'd jet the safety catch. Many people have been blinded with this stuff firing in their faces. I figured out how much magnesium was needed and I looked at the table and it said, use four number three capsules. Well, I thought number three capsules were the small capsules. They happened to be the big capsules (each were four times the strength of the small ones). So I loaded this pan up with magnesium powder, held it over my head, pulled the slide from the camera, and checked if everything was ready to go. Then you open the shutter, fire the flash, then close the shutter. There wasn't any modern synchronization. So here were all these kids, and the teacher said, "Now look right at Mr. Adams and smile. Now I think it's all right, Mr. Adams." So I opened-bang-shut, and of course there was a large explosion. I used about fifteen times the amount of flash powder needed. Vast clouds of smoke rolled through the room, and the kids fell under their desks. We opened the windows, and the smoke poured out, and somebody put in a fire alarm. [Laughter] And of course it blackened the wall and ceiling where I was standing, and I was persona non grata. But it was understood, and forgiven in time.

The developed negative was as dense as a stove lid, it was so damned over-exposed; about fifteen, sixteen times, I guess. But I took it to a friend who reduced it, and I got a pretty good print out of it. When I tried to take another picture of them, they'd disappeared. They were just terrified!

Then I did a wedding. By that time I'd mastered the flash technique pretty well. I was standing in a house with a nice white colonial room, and the bride and groom were standing by the fireplace. So I set the flash off, and as it was right under the lintel, it blistered the paint for about four feet! [Laughter]

Adams: Those were the first two things I was paid for, and they were both disasters. The clients were very kind--I offered to pay for the lintel, but they said, "Oh no, we were going to do the room over anyway." Which was a lie--the room was beautiful. But it was very embarrassing.

And then another one later. I was doing the--I think it was called the San Francisco "round table"--a group of the real bosses of San Francisco, big lawyers and financiers. They would meet at the Palace Hotel, and have this big "round table" lunch. Fortune magazine wanted me to photograph them. So I arranged with Mr. Lurie--Louis Lurie was in that group and he was very helpful.

One person was very nasty, but I called another and he said, "Oh sure, you can do it." I said, "Well, you know, it's quite a little job. To get you all, I'll have to be set up. When the lunch is through, you're going to have to spend maybe fifteen minutes with it." "Well, we'll do that," said my friend.

Ron Partridge was helping me. (He is Imogen Cunningham's son.) I got the camera all set and everything looked fine. We were using large flash lamps. I had five lights. But at that time the only synchronization you could get was a switch that was built in the cable shutter release. You pressed in, opening the shutter, and also made electrical contact. Well, it usually works all right. The contact operates the flash.

But this was one of the last buildings in San Francisco that still had direct current, instead of alternating current. And it appears that when you make such a contact with direct current, you get a flaming arc that is quite surprising when unexpected!

So here I am. I got one picture, I thought. But I said, "Well, I'll have to get another one." So Ron tore around town--almost arrested for speeding--to find a contact device. In the meantime, I had a Rolleiflex, and I went up to every man with a flash gun and a globe (I had no film in the Rolleiflex, but I thought, "I'm going to have to keep this going")--so I go "click, click, click." One of them said, "I've got a date." I said, "Listen, Ron will be back in a minute. And after all, this is a Fortune magazine job!"

So back comes Ron with this new flash contact, and we got another picture. But he handled it separately. I counted; I'd say, "One, two, three." On "two" I opened the shutter and on "three" he operated the flash.

Teiser: You were holding the lens open while he shot the flash globes?

Adams: I was holding the lens open. So I'd say, "One, two, bang!"--Close. Then, "Gentlemen, you can go home."

Adams: Then they said, "Well, I want to see those little pictures you made; I'll bet they're the best of the bunch."

I got letters later [laughter]. And I couldn't tell them. I said, "Well, I had a disaster with that too. That was a very bad day, gentlemen." [Laughter] That's the only way I could have held them fifteen, twenty minutes sitting there. Such things happen to photographers.

Teiser: Did you get a good picture in the end?

Adams: Oh, yes. Fine. I still have a print somewhere. It's a rather valuable historical image.

Now it'd be so simple! You'd take it with available light, or just bounce a couple of lights around the room. (It's called "bounce light," where you direct strong lights against the wall.) You get an effect that looks like available light. If I want to duplicate the light in this room, the only way would be to reflect it, or "bounce" it. And once you put a light directly on the subject you get harsh shadows and you're in trouble. But then you were working with slow film at 32-64 ASA at the highest. And now we work with 400, 500 and higher.

Photographic Printing Papers

Adams: The first serious job was Parmelian Prints of the Sierras, a portfolio of original prints. And I did a frontispiece for the Book Club* edition of [Robinson] Jeffers's poems, which (I'm very embarrassed) has faded. That was done in 1928 or 1929. We didn't know about fixing and washing. The effect was probably accelerated a bit by the character of the paper they used in the book--probably a lot of sulfur in it.

Teiser: That brings up--how did it happen that Dassonville put the emulsion on the Taos Pueblo book paper? Wasn't there any that was adequate?

Adams: Nothing like that. The idea was to have the paper the same throughout. The special rag paper had to be ordered anyway, because you did not then just go and buy such papers in book quantity.

We ordered an ample amount in rolls, and Dassonville coated a certain number of them with his bromide emulsion.

Teiser: Could that be done now in a very expensive book?

*Book Club of California.

Adams: Oh yes, but you would have troubles. With rag paper and the papers used for platinum prints, the emulsion sank into the paper fiber rather than lying on a baryta coating. The emulsion was pretty thick, and that gave quite a quality of "depth" quite different from anything you see today. The papers today are baryta-coated. Baryta is a clay, and the paper fibers are filled with this clay, making it of course very smooth. Then the emulsion is deposited on top of the clay. Then, to get different textures, such as "pebble," "silk," and "tapestry" surfaces, the papers are put through calendars, a calendar meaning a roll with a pattern. It could be a perfectly smooth surface to begin with and then ruined by this treatment! Practically all of these "pictorial" papers you see are calendared into surface patterns. The best papers today are chemically very pure, given a neutral baryta coating, then the various emulsions. In the emulsion, the degree of gloss may have something to do with the starch grains that are incorporated. If you put more starch in the emulsion, you reduce the gloss. Now, I'm quite sure that today they have more complex chemicals, but that's what Dassonville did--he could make a very, very flat surface quite "dead:" no gloss at all. Or he could leave all of the starch out, and get quite a nice brilliant finish.

He hated to leave the starch out, because he didn't like it too brilliant. I wanted it as brilliant as I could get it.

Now what we can do today, we can take papers of that type and get all the advantage of the natural paper color, and then we can spray them with a neutral lacquer like Krylon or Goodman lacquer. As far as we know, that's permanent, but putting a varnish on them can be fatal. They used varnish in printing in earlier days, and it yellowed.

We put a blanchophor into the paper to increase the whiteness, and that works well for daylight. Any light that has a preponderance of blue rays in it excites these blanchophors and creates a fluorescent effect. Some of the papers have that, and there is a difference in the whites when you look at them. But it drives the engravers crazy because it fools them in their exposures. These emulsions are sensitive to fluorescence and ultraviolet. And that increases contrast. Giving the engravers a sepia-toned print is also bad, because their films aren't sensitive to such colors.

See, when an engraver makes a color reproduction he has to make color-separation negatives first with three color-sensitive films--red, green, and blue or the complementaries. And they have to be made, of course, on panchromatic film. In the old days, when they had ordinary or orthochromatic emulsion, it was terribly difficult to get the red. They had to fake the red sometimes, and color reproductions could be very bad. When they get their three black and white separation negatives, representing the three colors, then they can transfer the images to their "plates."

Writing the Basic Photography Books

Adams: Going into reproductions, I did an article for the London magazine, Studio. They liked the article and asked me if I would do the book on photography in their "How to Do It" series, in which they had Levon West, the etcher, who later left etching and took up photography and was known as Ivan Dmitri. He was a pretty good etcher. His book on etching, I understand, is excellent. He was a fair photographer.

Well, I did this book, and now we're thinking of reprinting it just as an historical object, because it was at the time one of the most concise works on straight photography.

Teiser: What is it called?

Adams: It's called Making a Photograph. The first edition was in 1935. I asked for good reproductions, and they agreed. The plates were beautifully made, printed on very smooth paper, and tipped in--which, of course, is an ideal way to do it. It gives the illusion of being originals, but if one corner gets dog-eared, or if people lift them out, you know, you can get into trouble.

Now there's no need of that at all with modern double offset. You just print text and images on the same paper. You use smooth paper, and then you can apply lacquer with what is called tint block on the press. Lacquer increases brilliancy.

But Making a Photograph in 1935 was the only book of its kind known that was quite that simple and had anything like those reproductions. They were simply marvelous.

I remember going into Chicago one time, waiting for a train, and went to a big bookshop, where there were a lot of photographic books, and I pointed to mine and I said, "How's that going?" He said, "Oh, it's going fairly well. It's written by one of those highbrow Englishmen." And I didn't have the heart to tell him that I was the author.

It's interesting that a photographer living in San Francisco would have his first book published in London, or the first book of any consequence in the instructional sense. Now that I say that, it sounds very conceited, but still it has a function that's very, very good, and there would be very little in it that would be changed. Of course it was done long before the zone system appeared, so there was no real analysis of exposure development and control.

Teiser: Your Morgan & Morgan Basic Photo series--

Adams: First there was Camera and Lens--Book One. That's now been revised; it's a rather handsome 304-page book. Now I'm working on revising the others--The Print, The Negative, Natural-Light Photography, and Artificial-Light Photography. And then Book Six is the Polaroid manual [Polaroid Land Photography Manual]. The revised edition will probably come out, if all goes well, very soon. But as soon as a book's out, they've got a new process! The first edition of that was very bad, because PolaColor came out right after the book was published; I knew there was to be color, but I had no idea when it was coming, and they couldn't tell me. So we had a filler inserted afterward.

And now the new process, the SX-70 system, which is a fantastic achievement--that will be in the revision. God knows what else Land's got up his sleeve.

Teiser: It must have been hard to sit down and write.

Adams: Well, I'm very glib. I need an awful lot of editing, but I'm very glib. When I get going I can write very fast--quantities.

Teiser: But those books are so precise.

Adams: Yes, but if you know your subject you can write. The difficulty is checking to be sure you have all the details right, and when you read your own manuscript you find that you often overlooked important things.

I got a letter today. I mentioned a tripod number, 403 733 A, Goldcrest. Well, this man writes, "There isn't any such tripod. The Goldcrest people say it probably means 337 A." What it was, you see, I'd put down number 403 337 A, and the typesetter made a mistake in his composing machine, and I didn't catch that in time. I'm going to have now an editor that will do nothing in the world except check word for word and number for number.

Teiser: Did anyone read over them?

Adams: Yes, but not the way it should have been. Not a technical person.

I had another instance just the other day. A man wrote, "In your warm-tone Glycin formula [page 14, The Print], you say 'potassium bromide, four grams', and right under it you say 'potassium bromide, 40 cc at 10 percent solution'." I never caught that. It should have said "or" because that's the same thing. He said, "Why did you want to put that in? Why didn't you just use more bromide?" Of course, anybody who knew about it would realize they were the same, but the word "or" is left out.

Adams: You say that's easy, but there's hardly a scientific book that comes out that doesn't have a page of errata in it, and some have ten or twelve pages. I've seen one very complicated thing on the photo-physical chemistry of photography that had four or five pages of errata--slight changes of formula, etc. And of course unless you're a mathematician, you wouldn't realize it, but when a mathematician tries to work something out and he finds something wrong, he is disturbed!

Teiser: When you work on such technical things, do you take whole days, or do you take a whole period when you don't work on photographs?

Adams: Well, realistically I should just cold-bloodedly set aside a month for this and a month for that, but sometimes I go at it for several days, and then suddenly the curtain rings down. I've completely lost the facility to think. I'm loaded with work continuously. So I go on to do something else. And when I did the book on the University [Fiat Lux], I couldn't stay more than three or four days in one place because after that I just stopped "seeing." I could say, "Oh, I have to do a picture of that building," and it meant nothing. So I'd "pogo-stick" to another campus and then have several days of excitement, and then all of a sudden you don't see any more and you must move on.

The Zone System

Teiser: Your writings on the Zone System--

Adams: There are so many versions of the Zone System. They all come out right, but the best one, the clearest one, is in the Polaroid Land [Photography] Manual. People buy the Manual just for that, and I never realized that. It is a kind of distillation and applies the principles step by step, in much clearer style than the other expositions.

Teiser: You said that Minor White's article or pamphlet on the Zone System was an extension of your work?

Adams: He has a booklet. He's doing a new one, which I haven't seen yet, which goes into the mystical interpretation of photography. It worries me a little because I think he's inclined to go off the beam and be inexplicable (is that the word to use?). It's a form of "camera as therapy," and I don't know; between you and me, it's not entirely healthy, it's too mystical. It's a constant justification and explanation, where photography should be a rather simple thing.

Adams: But he has some very good exercises, and details for working out the Zone System, for students. I find it very complex, and he makes a few errors, which I think are deplorable. It isn't whether he agrees with me. I didn't invent the Zone System. I simply codified sensitometry. If you want to juggle with it and say, "Well, you know, you can't print Zone I, so we'll start with Zone II," that isn't scientific. That isn't sensitometry, you see. [Laughter] I can't say, "Look, you're hurting my system. You can't do that." I just say, "It's not right. It doesn't stand the test; you have to begin one end of the exposure scale at Zone I."

There's a man in Sacramento who thinks he can get by with five zones. Well, if he wants to do it, okay. But it's still not right in sensitometry. The values that we can refer to with confidence are in geometric ratios. And if you know anything about lenses, you know how the stops of lenses progress from, say, $f/8$, $f/11$, $f/16$, and so on. The point is that the $f/8$ means the focal ratio of the diameter of the stop to the focal length of the lens at infinity. So $f/8$ means the diameter of that stop is one-eighth of its focal length at infinity. So therefore $f/8$ is a factor number that relates to any focal length lens, one inch to twenty inches. $f/8$ will always be a stop in that ratio, and will always transmit the same amount of light, no matter what the size of the lens is.

Then you go on $f/11$, $f/16$, so you think $f/16$ would be one-half of $f/8$, that it would let in one-half the light. But you're working with the area of a circle, and that means $f/16$ is letting in one-fourth the amount of light $f/8$ does, because a circle one-half inch across has only one-fourth the area of a circle one inch across. To set one-half the exposure you multiply eight by the square root of two, 1.414 (here's geometry again) and then you get $f/11.3$. You actually progress at 11.3, 16, 22.6, 32, 45.2--those would be the exact numbers, but we approximate them by just saying 8, 11, 16, and 22, etc.

Well, some people don't know what a square root is. They know what a square is but not a root. It's just basic geometry. Now, there used to be the old U.S. system, which meant "universal system," and they started at $f/16$ being the same as U.S. 16. And then, $f/8$ passed two times, $f/4$ passed four times, $f/2$ passed eight times the amount of light, with ascending numbers like 16, 32, 64, 128, 256. Every one was doubled, and it meant 2X, 4X, 8X, 16X, and 32X instead of 4X, 16X, 64X, 256X, etc.

The Europeans, instead of having $f/8$ as the base, used $f/9$ --but the same thing. You get $f/12.7$, $f/18$, $f/25$ --the ratio is always the same. And ASA speed numbers are 64, 125, 256, and between each of those are two other numbers--like 32, 40, 50, 64; 100, 125, 256. And if you once get that geometric idea in your mind, fine! But

Adams: meters come out with exposure values with arithmetic numbers, but which have geometric significance--all very confusing. On the Weston 5 meter, number twelve was equal to 100 candles per square foot, number thirteen equal to 200, number fourteen equal to 400. So in reading these numbers, you really have to think geometrically. But many people don't think, they just take for granted a number on the dial. They put it on the "arrow" and they read the exposure. You're just pressing buttons without any knowledge of what's happening, and I think that's very serious. And the exposure formula is so absolutely simple once you know it. You don't need any dials; you take the readings of your subject.

A typical example would be if I want to make a picture in Yosemite, and it's a contrasty day, but I want to get a tone value III in the tree shadows, and those tree shadows read 6.5 c/ft². I put 6.5 c/ft on Zone III, go to 13 on IV and 25 on V, which is the "geometric mean." So the exposure is 1/25 of a second at the lens stop number, which is the equivalent of the square root of the ASA speed number. And people collapse. And then you try to explain again and say, "Well, that's nothing. Now you know you have 25 opposite V, so that's 1/25 of a second; that's simple. And if you're using ASA 64, the square root is eight, so it would be 1/25 at f/8" (that's your base exposure; you don't need a dial). Or if you're using 125 ASA, that would be f/11, or ASA 250 would be f/16. You just memorize a little table of squares. Kodachrome at 25 would be f/5. The whole idea of photographic exposure is really a geometric system. That doesn't mean that you don't work between stops to balance and control. The Polaroid electric eye camera is extremely sensitive, and you don't think of any f stops or shutter speed there; you know it's calibrated to render a single surface luminance with a value VI. And there's reason for that. It automatically registers the values in this infinite series of adjustments, but you can make it lighter or darker, according to the contrast of the scene, by using the lighten-darken (L.D.) control. But the theory is exactly the same.

Meters and Automation

Adams: In the earlier days, we did everything "by grace and by God" and by tables. I had a little meter--a tint meter--that would use sensitive paper and there would be two reference colors, light and dark green, or light and medium green. And you'd hold it in the light and count seconds until the sensitive paper was the same color as one of the reference colors. But of course it's very hard to do, to be exact, because your eye doesn't like to make that kind of decision, you see,

Adams: especially if there's an edge. But you count, say, fifteen seconds and then you relate that to some mark, and you set the exposure. It was fairly accurate if your eyes weren't too tired.

Then I had extinction meters, where you look in and see a wedge, and you look at the scene through it, and you read the highest number you can see--it might be six, it might be fifteen. The tragedy was, if you came out of a very bright light you'd see a very low number, and then the longer you looked at it, the higher and higher and higher the number you'd see. [Laughter] So you had to sort of balance that out. If I was sitting here now, I could look in this room and I'd trust what I read. But if I were looking out at the ocean for a while and then tried to read in the room, it would take me about two minutes before I was confident that I was seeing the correct number.

Then the Weston meter came out, which used the selenium cell, which is a self-generating cell--selenium on one side. As light strikes this material, it creates energy and works an ammeter. The Weston cell was a great invention, and it's used in many, many ways, and it's probably one of the most accurate and dependable of all the meter devices. The only thing that can go off is the little electrical ammeter, which is working on a very low current. The current is just generated in the cell entirely by light. There's no batteries in the meter at all.

Then the next step was the cadmium sulphide cell, which is extremely sensitive and is operated with a very small battery. But it is inclined to be very erratic. It has to be primed. You have to show it the light for a little while. That's the average cell, although the one Dr. Land uses is apparently "capsulated" and gives immediate response.

And now most of the meters out on the market--Weston Nine and the Gossen meter and the Pentax and all those in the cameras--are based on little sulphide cells.

Then there's the standard visual photometer, like the S.E.I. meter (made in England). That's probably the best thing of its kind made within the price; you can get photometers up to four figures. But this one has a battery and a light, and you adjust this light to a fixed brightness, which properly illuminates the comparison cube. Now you match the light from the scene through a little telescope by operating the main rheostat until it matches the fixed brightness spot. That gives you the photometric measurement. But that is using a fixed value to match--not like the extinction meter, which depended entirely on whether the eye could see a number or not in a dark field.

The S.E.I. meter has a diameter of field of view of one degree. They've increased it a little bit lately--it's one and a half now, I think. So that means I can take the shadow on that tree trunk, and

Adams: I can take the white rock, and the highlight on that lamp, and the white picture frame with the picture on the white mat from here, you see. You just put the dot on it, and turn this thing until the values match. That's really a great invention, because it gives you command of what you're doing. All on the assumption that your shutter and your diaphragm are correct and that your film and developer are properly functioning.

[End Tape 6, Side 1]

[Begin Tape 6, Side 2]

Teiser: Have you had any experience with the light cell in the camera?

Adams: That's a new development which is primarily a gadget to sell cameras to indulgent and wealthy amateurs. It's extremely clever and many are extremely well made. If it is a meter which averages the light coming in over the entire field--it's like holding a Weston meter up to the field of view. If it's a spot meter, then you have the inevitable selection of what you point it at, because the spot doesn't know; it will respond to the tree shadow, and to the water, and will control the exposure accordingly. I've made tests with the new Leicaflex, and it was extremely accurate--a beautiful piece of equipment--but I still had to make up my mind, putting the spot on a snowbank or on a tree, and the exposure will always be on the geometric mean.

Now they have new meters which are a combination of the two, which probably is a little better. But the camera can't make the aesthetic selection if it is purely automatic. It can approximate it. But as 90 percent of the pictures taken are of people, most cameras and systems are calibrated to flesh tones. So if you point this box, this finder with the spot meter, at the skin of a person, you will get a reading which will put that on the proper point on the exposure scale. God help you for anything else, because everything you point it at will come out at the same point on the scale.

I went through this whole complex scene in Yosemite with my photometer, and the Leica meter was very accurate. But still, that was just the meter. Now what do I do with it? Do I want to place that tree shadow on Zone V? I might want it at Zone II. Where do I put it? So the only way you can control that situation is to set your ASA and set the related lens stop. You then control the shutter speed dial until the needles match, and then you have the candles per square foot.

Teiser: So it's more trouble to override the automatic system than not?

- Adams: Oh, it's terrible. It's much better to have a separate meter, read it and set the camera accordingly. But then some automatic cameras don't like to be "overridden." I've seen people with cameras that cost hundreds and hundreds of dollars completely frustrated; they had no idea what was happening, and they were getting terrible results. The camera was doing the best it could--beautiful optics--but the user had no knowledge of what to do.
- Teiser: I suppose there will be a whole lot of people who adapt themselves to the automatic camera.
- Adams: Oh, there are now, yes, to a certain extent. But see, where the Polaroid is so far ahead of them is that with the Polaroid electric eye receptor you have the ability to make it lighter or darker. Now that's not too easy in the standard camera. You have to change stops or shutter speeds. Well, what are you changing, you see? In the Polaroid you can change two stops to light and one to dark. They're going to try to get it two stops each way. And that's a very intricate little system, but they can put it on their very cheap cameras. And when you press the shutter it releases a certain amount of current that controls the electronic mechanism.

Now we are getting those cameras that have electric drives. The Hasselblad electric is just simply winding the film and setting the shutter. It doesn't control the exposure, thank God. But you can put it on sequence, take a picture every second, or you can just press the button and have one image. They sent me one, but really, I still have enough strength to wind the film! [Laughter] But it really is wonderful when you have these 70-millimeter magazines with many, many exposures to make in sequence. You're doing, say, a series of portraits, and you're talking, and you just press this button, and press and press; it's "sh-sh-sh," like that. But that's not exposure reading; it's something else.

Now some equipment has electronic shutter control, and they're having a little trouble. They're awfully complex, you know. Polaroid is the only one that, so far, has been able to make these things in quantity. Everybody else has had trouble. I guess Kodak is all right with the Instamatic. And they use the same general principle. Unfortunately, that principle of electronic exposure was not patentable--not controllable by Polaroid. The thing was patented many, many years ago, and it's now in the public domain. It wasn't used in shutters. It was used in scientific instruments. It was used first in engraving, so no matter what happened to the fluctuating arc lights, the exposure would always be the same. And this was called an accumulator. There would be a little meter on a copy board in the engraving camera. They'd set the exposure, say, for three minutes, and then the meter would take care of it and balance all lighting variations. All these things are so interesting technically, and they all had their roots in various applications, long before they were thought of in actual field camera work.

Technique in Relation to Aesthetics

Teiser: When you were a youngster, were you interested in optical instruments?

Adams: Oh, yes, I loved instruments--always been an instrument lover.

Teiser: Were you interested in your father's astronomical instruments?

Adams: Yes, oh yes. Of course, we only had a small telescope. We used to go up to Lick Observatory, see the big telescope.

The thing to get over is this: that I think my contribution, if there is one (the creative work is something which only critics of photographic history can say whether I did any pictures of importance or not--I'm conceited enough to think I did a few)--the main thing is that, as far as I know, I'm the first one that codified technique in relation to aesthetics. You see, now there've been many, many people who've codified technique in relation to just facts--exposure and instrumental control and all that, and far beyond anything I've done in physical accuracy. You know, when you're making photographs in terms of nanoseconds and tracing spark gaps, and doing things from the U-2 plane with slit-shutter cameras at sixty or seventy thousand feet or higher (and you can see gravel on the railroad beds)--these are optical achievements that are infinitely beyond me.

But as far as I know, and as far as other people know, I'm the first one to have said you can control exposure and development in relation to aesthetics, not just in relation to the photometric equivalent. And the photometric equivalent means the light measurement which has the proportionate values of the subject, getting a negative, and then, with light passing through the negative, getting the value equivalent of the negative on the print. It's called the photometric equivalent, and it has nothing to do with expression. It relates to an approximate simulation of reality. And, in aesthetics, we attempt departures from reality, whether we do them by trick and by guess in the darkroom or whether we do them all ahead of time by visualization.

I remember one of Minor White's great achievements. By the way, he's one of the great photographers, and I have the utmost affection and respect for him, so when I criticize what he did with the Zone System, that just means the difference of technical application. But he did a series of photographs of performances of Ibsen's Ghosts in San Francisco, and in doing this, he wanted to give the nonliteral feeling of the unworldliness of the characters. It was done very simply by just using the Zone System, placing the skin values very high. So all these people in the images are white--very pale, very

Adams: unreal. And then, you see, it's not just value. If you go up the top of the curve, it flattens off, and your contrasts become less, so the face would become smoother, much higher in value, much less defined. But you can visualize all that. So that is, I think, the contribution which is now being pretty well accepted.

Science and the Creative Photographer

Adams: I had the funny comment of a photo technician from, I think it was, Eastman. He says, "You know I'm up there in that pretty hard-boiled lab, and we're working with some of the most complex photochemistry and physics that's going today but," he says, "when I want to know something about photography, I read your books." [Laughter] I said, "Well, thank you. I understand the difference." You should see sometime one of the technical manuals! You know, it's just up in the domain of higher mathematics and advanced physical chemistry. But everything has its place, and that's what enables them to make the materials that we people can throw around in a so-called creative sense.

Even at this late date, they are not absolutely sure what happens in the formation of the latent image. You've got a silver crystal, which is a nice-looking triangular crystal--different sizes--I forget the name of it--it's got bevels and edges, but it's primarily a triangle. And that is silver halide, composed of silver bromide, chloride or iodide in different proportions. And then, light strikes that crystal and changes it to the "latent image." It's a matter of the quantum theory, if you want to really describe it, which I can't. It relates to the production of "electron holes" in this crystal, and when this condition is established by the action of light, the crystal is then developable, and these holes then attract developing agents, and the silver crystal is reduced to metallic silver. That's a very crude description. A scientist would probably be aghast--but I mean, that's about what happens.

So then when you develop your image, your image is metallic silver, but there's all kinds of silver halide still left in the emulsion. Then you put the negative or print into the hypo bath (the sodium thiosulphate solution) which removes unexposed and undeveloped silver halides remaining. So you have left the pure silver image, which in the electron microscope appears as filaments--looks like seaweed. The negative in principle is about the same as the print. But with the Polaroid print, instead of having a comparatively coarse-grained image like a conventional print, it's ionic silver that's deposited. It's attracted across the developer to the receiving sheet, and the positive image appears. These of course are too small

Adams: to be seen, even in the electron microscope. But the ionic silver depositions (and there is a kind of a structure), when that gets too compact you have something like silver plating, and the surface of the print will show what they call "gilding," a metallic sheen.

So if you take a four by five print--conventional print--and you could consider the surface area of all those crystals, it would probably be as big as this room. If you took a Polaroid print and could lay out the surface of all the particles, it would probably total an acre. And that is why it's extremely susceptible to any chemical contamination, because of this large surface, which picks up sulphur and other chemicals. Silver loves sulphur! Sulphur does not "degenerate" silver, it's just silver going to its most stable compound form. That's why an ordinary photomural is usually toned to an "egg yolk brown," sepia tone. It is really silver sulphide, and that's permanent. The problem is to keep plain silver from turning to silver sulphide. When a picture fades, like mine (and many others') did in the earlier days, it was because the print was in a condition to combine with sulphur.

Teiser: Why in the world did people make sepia prints?

Adams: I think largely for that reason--they were relatively permanent. Besides they weren't just that ugly old black-and-white; they had a romantic [laughter]--a romantic color to them. There are all stages of tone. You can get a blue-black and a neutral black and a brown-green black and a selenium purple-brown black. My prints are toned to get away primarily from this peculiar green-brownish tone (there's more green in it than anything else) of the commercial paper. That seems to be the natural tone of the silver image.

Teiser: I think of these big brown Southern Pacific photographs.

Adams: They had to be that color because there was no way they could process, at that time, without toning, with any permanence. Sepia toning was done by bleaching and redevelopment. There are "matrices" in the gelatin. The gelatin is a very strange, stable substance and keeps its form even in submicroscopic pattern. And there are sulphur and silver nuclei left therein. They're invisible, so the print after bleaching has practically no image at all. And then you redevelop, and the image that was silver before has now become silver sulphide. And silver sulphide is inert. I suppose some things would affect it--stains, and all that--but it's basically permanent. Very seldom you see a brown sepia print that's really turning or fading.

Teiser: I was wondering, when you were speaking yesterday about the development of the Land process: I remember, oh I suppose in the thirties, at Fisherman's Wharf, there used to be a man with a camera, and you would wait for a couple of minutes, and he would give you kind of a funny little picture on metal--

Adams: Tintype.

Teiser: --instantly.

Adams: Well, the machine was pretty clever. I don't really know the process. It's not very permanent.

Teiser: No. The one I have has faded.

Adams: It could be--but, well, you have several methods--reversal processes, for instance. I just can't tell you what they used.

Teiser: I think it had been used for many years before that--

Adams: Oh, many years. It's an old, old process. But it isn't a very attractive process. It's very dull, whereas the daguerreotype is very beautiful. I think the name for a daguerreotype, "mirror with a memory," is one of the great verbal descriptions.

But you see, one of the problems we have in portraiture is satisfying the subject, and the daguerreotype was extremely successful in portraiture because it gave a mirror image. When you looked at the daguerreotype, you saw yourself as you look to yourself in the mirror. And sometimes we look very different to others than we do in the mirror. I can't see myself at all except in the mirror. Now, when I see a picture of myself, I sometimes say, "Well, that's not what I see every morning when I'm putting Vitalis on what's left of my hair." [Laughs]

I must say, there have been a multitude of processes developed in the history of photography. And now it's boiled down to the processes as you see them, plus the fact that we're getting into some forms of dye or electrostatic photography like Xerox. And every laboratory is just working twenty-nine hours a day trying to get a nonsilver process, but for some strange reason, way back in the 1830s, silver halides were found to be the only practical light-sensitive material. And when you speak of platinum or palladium processes, those salts are not sensitive in themselves, but they ride on a ferric process. This process is very slow, but it can produce beautiful image qualities.

The Polaroid is a total miracle and is not just one thing; it is a system of very many, very complex processes which are constantly advancing, changing and adapting.

I wish you could see the patent for the new camera in process. You can buy one. I don't recall how many pages it is, but there's about sixteen pages listing the organic compounds that can be used. An interesting thing is that there were two hundred copies ordered

Adams: by Eastman Kodak Company! [Laughter] Perhaps they're trying to find some loophole in these patents, you see, where they can get through. Polaroid has a large staff of patent experts.

Polaroid started out with a silver sulphide image, a brown image, and then advanced that to black and white. And they achieved two hundred speed. I don't really know the details, and I'm not authorized to say if I did know, but I know that the process is constantly being refined year by year. Then they achieved four thousand speed! Land was out in San Francisco before we moved down here, and he had an experimental twenty-thousand-speed film! We were taking pictures by starlight, out the window, at a fifth of a second. They weren't very good quality prints, but they were informative images. Now they have a film that's on the market that is used with the oscilloscope--ten thousand ASA speed, and that enables the recording of very faint, really very faint, images.

For some reason, the quantum theory limits the "speed" of emulsions (ASA rating) to about forty thousand. Without electronic image amplification you couldn't go possibly beyond forty thousand.

But a whole new world opens up with the vidicom tube; modern X-ray technique is a fine example of that application. Now they're using it in astronomy and seeing things that are totally beyond visual and ordinary photographic recording. So maybe one of the next developments will be a light amplification system, where your image will be produced in numbers, like in the Mars pictures. They don't come back in pictures, they come back in a continuous series of numbers. And there's an image put together, and it's about one or two centimeters square, I think.

The Mars system is so marvelous! The image is made photographically; then a scanner moves across. It has 128 levels of intensity, which are translated as numbers. They're given a code number on the tape. Now, when the scanner reverses direction it's sending in the response of a lot of other instruments on board. The next cross-scan is of the image. So what they get here is equivalent to an endless tape with numbers. Every so often, those are put together, and they become a stack of strips. Then they're translated into density values, and you have your picture.

From the moon we had actual pictures, but from Mars we have nothing but numbers which make pictures so sharp and remarkable that it is almost unbelievable.

Sensitometry as a Creative Tool

Adams: Well, anyway, this whole idea is of scientific interest--I think I should clarify that statement. In no way could I be labeled a scientist or, in the classic sense, a technician. I don't know enough and don't have the capacity to use the technical facts of this world in any other way but applying them to creative work. So the emphasis should be, I think, in the fact that in codifying the Zone System, I made sensitometry available as a tool for creative people who wish to express themselves or depart from reality; but it is at a very simple level. In other words, there are several words that are different: "approximate" and "precise" and "exact." Most people approximate; I think I approach the precise, but I can't presume to be exact--there's too many decimal points involved! [Laughter] And if I use the square root of 2--it is 1.41422, and that's far beyond the precision I need. Well, 1.4 would be enough for all practical purposes, like developing. Take 8 and multiply it by 1.4--it's closer to 11.3 in reality, because when you multiply by 1.414 you get 11.312. So how precise do you have to be?

So I mean I mustn't be represented as a scientist or a real technician. I'd like to be known as an artist and teacher but, you know, never go beyond the logical bounds. But I don't know whether I've violated the original theme that you presented.

Teiser: It's all pertinent.

Adams: Most of the creative photographers in the world never knew anything about the Zone System or ever used anything like it. They're entirely empirical in approach. And you learned by trial and error that under certain conditions you exposed a certain way. Sometimes you modified development, if you knew what you'd done and could rectify some of the errors in the darkroom--which can be done to an amazing degree. So we can't say Edward Weston or Stieglitz or Strand were questionable photographers because they didn't understand sensitometry! But from the point of view of efficiency, getting a negative that I want, I can run rings around them, and I do not "bracket" my exposures.

This awful word, "bracket;" in color pictures you bracket one or two stops, just to be sure. Well, my ego won't let me do that. I know what the values are; I know where they fit on the scale. If I have to take pictures of an important subject--a photograph that I know is valuable--I'll take several duplicate pictures, but they'll all be the same exposure.

In the time of Group f/64, I would say practically everyone was working very empirically. I don't think anybody was really controlling anything. Weston went to Mexico, and he learned the lighting

Adams: situations, and he probably had many failures in the beginning. He probably had failures in the field, or at least he had darkroom struggles. I did; everybody did.

It was around '36, '38 that [Beaumont] Newhall sent me a clipping about the S.E.I. meter. I was laid up with the flu. He sent me an article, a clipping on it, and I immediately ordered one by telephone, and I thought, "This is it!" At that time we were working on the Zone System, and the S.E.I. meter was the thing that really pinpointed it.

I'd like to say that any intelligent person, in an hour's time of serious discussion, can learn the whole basis of the Zone System. It's that simple. We had kids--students in the California School of Fine Arts in San Francisco--in six weeks time they could photograph anything I could think up. I don't say they'd make a great picture, but they could photograph--could expose correctly. They went into reciprocity failure tests. That's another domain. It's pretty complicated. And they tried many different developers for special effects. And at the end of six weeks they had a very fine mechanical mastery. Now what they did beyond that, that's something else.

Teiser: When you were developing the Zone System--in the mid-thirties, was it--?

Adams: Well, no, it was when I started teaching in the Art Center School, Los Angeles.

Teiser: Early forties?

Adams: Well, late thirties and forties. I don't know the dates.

Fred Archer and I worked out the Zone System, and we got the Weston meter representative very excited, and he said, "I'll mimeograph you a lot of your charts. I think they're very important." We had several charts--exposure charts, which are standard; they haven't changed any. And then we had density charts--curve reading charts--where you have coordinates on which to plot values and relate them to zones.

One time I remember the students, everybody working along hard and everything coming out wrong. We had forgotten to include Zone V on the chart, which meant a factor of 2 was omitted! Well, [laughter] those things can happen.

I found out that serious people want to know how to control, and many people tie themselves in a knot wanting to know how to begin. The ones that always give me a real pain in the neck are the ones who say, "I can judge the light." I said, "Well, anywhere?" "Oh yes, anywhere. I never need the meter. I don't need a meter."

Adams: Well, it's physiologically and psychologically impossible. It's just like saying I can judge your weight by looking at you. I can make an empirical guess by looking at a lot of other people like you. But it's a pompous thing to say. If I didn't have a meter, I would have to bracket exposures. I would have to make a guess and then go above and below it just to be sure. I don't really know light values. I know in Yosemite, from ten in the morning until four in the afternoon, the shadows in the trees on a clear day are so much, and I know where granite is on the scale, and so on. But in New England I fell flat on my face--missed all the light there. At Santa Fe I again fell flat on my face--misjudged the light. Had to make tests and find out what it was in general. Hawaii was the same, although by that time I knew how to use meters. When I went to Hawaii I wouldn't trust them. I mean, I'd say, "Well, this can't be." And then I'd give in and say, "Oh, I must trust the meter. It was a good meter, and I was just applying experience as well, which was all right.

Teiser: The quality of light is so curious, isn't it? We were just discussing it as we drove along.

Adams: Well, the quality of light--in the early days when O'Sullivan and others worked in the Southwest (in fact, anybody at that time)--the films accepted only blue light. You don't get the optimum amount of blue until about nine-thirty or ten o'clock in the morning, and it begins to go at four o'clock and the light becomes redder and redder. With blue-sensitive plates this posed a real problem.

But, I don't think that these early people could work except between ten o'clock and two or three o'clock with any assurance. Then when the orthochromatic film came in, which accepted green, you had more leeway working with longer wavelengths. With orthochromatic film, you could still get into trouble with late or early light.

The light now (6:15 p.m. Pacific daylight savings time)--it's deficient in blue. It's all right; I can still get by with panchromatic (red-sensitive film) without much difficulty. But you wait until seven o'clock. In the old days, even with orthochromatic film you'd have to multiply the exposure four or five times. But you never really knew how red it was. We now have color temperature ($^{\circ}$ K) meters to inform us of this quality of light. The eye-mind complex, being an absolute miracle of construction, adapts to differences of color temperature. You're not aware of the light now being very much of red quality.

You take a white piece of paper and put it under a tungsten light--it appears white; you take it outside in the sun or shade and it also appears white. The difference would be apparent when you could have both together. The best example I ever had of that was

Adams: Mills College Art Gallery. I went over there with Albert Bender to see some big show, and this whole gallery was illuminated with tungsten light. We were in there, and everything was perfectly normal--white labels, white shirts. But I looked out the door, looking out into the woods, and they were absolutely turquoise. We call it cyan now. I mean, here was a bluish-green gorgeous thing, and I thought, "What's happening?" And I went out, and as soon as I'm out, it's perfectly normal--they're green. And I looked back into the room, and it's gold. The eye has adaptability which the film does not. In this case there was opportunity for direct comparison.

Now, I'd be conscious of a direct physical reflection of blue light from the sky, or red light, or orange in your dress, or similar things. I can see a little orange light on your face from your dress. But a color film would just accentuate that--the shadow might be distractingly orange.

So all this matter of visualization relates to seeing the image you want, but you have to also take into consideration all the idiosyncracies of the light itself, and the meter and film sensitivity. That's why photometers are important. You take any Weston cell or a CdS [cadmium sulphide] cell, and over an hour or so from now its response to changing daylight differs. Whereas a comparison photometer is something else, because if the spot looks bluish, you just put in a light filter that can control its response (as well as that of the film). In fact, my S.E.I. photometer is a practical color temperature meter if I have somebody to hold a compensating filter in front of it while I am using it. (Takes two hands to operate it!)

Suppose I wanted to copy a painting in a gallery, and I know the light is tricky, and I know what's going to happen, and I have to do it in color photography. If I have a fifty-dollar color meter, which will give me readings in mirads, etc., I can figure out what filters to use, etc. But I can take this S.E.I. meter and look at the gray card, and if the spot looks yellow I may use a variety of number eighty series filters--or other filters--held in front of the meter. And I may find a filter which makes the spot neutral and that's the filter that may correct the film for color. Because I match the color with the fixed brightness which is already filtered, for both tungsten or daylight, by selecting one of two built-in filters in the meter. If I'm using tungsten balanced film, I set in the tungsten filter.

So there's a strange dichotomy--the principles are rather complex, but the devices we have to control them are fairly simple, and the photographers who use them are, 90 percent of the time, extremely dumb, because they don't take advantage of the devices we've got. [Laughter] And then when they make a mistake of exposure

Adams: or development, they immediately justify it by making some further mistake in the printing, or maybe trying to pull something out of the hat by processing experimentally. And sometimes, of course, miracles happen. You know, you could really get a bad negative and nevertheless get a print that might have exciting qualities.

But I'm just not built to accept what is called the accidental.

Contemporary Images

Teiser: I was looking at photographs in the latest U.S. Camera magazine this morning by "coming" young photographers. And one of them was a picture of a whole bunch of people standing lined up in a field and all their heads were blurred--their bodies weren't, their heads were. I didn't take time to read what was so good about it.

Adams: Well, the tragedy there is sociological. I mean, our whole society or government, or whatever we have, hasn't given anybody any challenge to think. Everything is mechanistic, technical. Thinking is all done in Route 128 outside Cambridge, or up here in Sunnyvale, at those big research centers. Everything is carefully thought out, but the social situation is very unclear. And most people have nothing to say. So they're inventing symbols. And they'll make a photograph, and then say, "Well, this means something to me." Now, perhaps we can say of this lineup (I haven't seen the picture), "This would be an unusual approach to the certainty of the body and the uncertainty of the mind." You'd be surprised what is read into these things, into picture after picture! Or a picture done in Rochester of George Eastman's house porch. It's just a square picture of a dark column--frantically bad.

Jerry Uelsmann has really made a great advance because he's combined negatives and created true fantasies. Personally, I find they wear thin after awhile, because the whole thing is a bit limited. And then you begin to think of what Dorothea Lange did in interpreting a human situation. And of course what all the great painters of the Renaissance did in the religious area--you have to remember that there were no other themes in Western art at that time but the Christian religion, and the portraits of a few potentates and princes. The art that was done outside that field is miniscule. If you're an art historian, you may correct me--there may be some done, but as you move on later, then you get into the genre of the Dutch and landscapes and the Barbizon school. But art always fails if there isn't a theme.

That's the trouble now with abstract expressionism. It did its job, and it was wonderful when it did it. It was part of a protest, and I think art now is at the very lowest level it's been. And that's

Adams: why they're painting paintings as big as this room. They're trying to regain some grandeur by just going to big paintings. But how many great painters can you think of today? Well, I can think of [Georgia] O'Keeffe, who's still a great living painter. John Marin, [Edward] Hopper--they are dead. (I'm trying to think of modern painters.) [Andrew] Wyeth I think is a glorified Norman Rockwell; I simply can't--I think he's one of the greatest fakes going. Some of his paintings are absolute copies of snapshots! The reason I feel it is this: In his large book there is a graveyard scene in the back of a church; a good photographer with any sensibility would see the formal relationships of these gravestones with the church. I mean, he'd make some effort to compose. This picture shows no effort to compose. This is just a "click," and there it is, and he painted it. And that bothers me.

But think of [Charles E.] Burchfield's picture, the "Hot September Wind"--or even some of Wyeth's, like that "Wind in the Curtain;" there is magic in them.

But who's really doing anything among photographers? Well, Bruce Davidson did a book on New York [East 100th Street] which is very important. But so many of them withdraw from any human project and just sit back and ruminate--smoke pot, and get an idea that the chair is important, "I'll take a picture of it. Now, you undress, you be a nude and you sit in the chair, and I'll do a double exposure, and maybe I'll put something else in the picture. Now I've done something!" [Laughter] And this means just something, little thought of human communication. But you'll see many of these double and triple exposures most of which are terrible. Some of them can be beautiful, but most of them are so trite!

There's a whole mode now of a living room scene with the members of the family sitting around nude. They're mostly extremely unattractive people, and the photograph has absolutely no distinction. [Laughter] It's completely commonplace. It used to be a little daring. Now you say, "Oh, I've seen that before!"

And--the human body, in 90 percent of the instances, is far more aesthetic with clothes than without. [Laughter]

The Nude

Adams: I haven't done nudes for the simple reason that the human body can be extremely beautiful, but I've seen very few photographic nudes that can do what painting does. I've always had that in the back of my mind--"Why should I photograph a nude?" Now, Stieglitz and Weston of course did some beautiful ones. [Interruption]

[End Tape 6, Side 2]

[Begin Tape 7, Side 1]

Adams: Now, the question of the nude has always been very important in photography. And some of the early nudes I think were very ghastly because they were usually done in settings of drapes and formal Victorian rooms. We're talking now about serious nude photography.

I can't tell you about English photography. I think Julia Margaret Cameron did some--I just don't know. There were some painters: [Thomas] Eakins, I think, did some nudes, but I've always had the feeling they were studies for paintings.

Then there was Ann Brigman who did nudes creatively related to other forms--tree forms, for example--in the early 1900s.

Then there was Stieglitz who did a magnificent series of nudes of O'Keeffe and others. Most are platinum prints. But there again, you have this high quality of taste. These were beautiful things. The platinum print color and the approach always gave you the feeling of living flesh; a very important thing in photography. The painterly nude or drawing is always just what it is. And you always--from your Goya to your Rubens, and on to Picasso--have a nude quality which is something apart from the ordinary.

In photography, there's very, very few that have ever done a nude that have had that equivalent of the painterly quality. I think Steichen did a couple (I don't know for sure). And Weston's nudes of Tina Modotti, who had an absolutely beautiful body--as people say, one of the most beautiful bodies extant--were really marvelous.

And then he attempted nudes of various subjects; they're rather scrawny. They became very strangely stylized. As I said the other day, they were morguesque. They look like corpses on a slab; they have no life in them.

Then Charis Weston--had a very fine body--very smooth and tall. Weston did some beautiful things of her--in sand dunes and in various poses. I think some of those were quite remarkable, but all in all, I can't remember too many. I remember one nude that's simply marvelous. It's by Ruth Bernhard. And it's a seated figure, and all you see is the leg and the knee. And it's an absolutely monumental photograph--one of the great photographs.

Teiser: I was about to ask you about her, because she's one who's doing mostly nudes now, isn't she?

Adams: I guess so--she's doing a lot of them. She is a marvelous woman. But I haven't kept up with her work. But this one nude picture I just think is one of the most beautiful things in photography. And I wish there were more like it!

Adams: I've never had any interest in nudes because I never liked what I saw. I mean, I felt that there are few bodies that really lend themselves to the photographic aesthetic--something more than members of a nudist camp. Mortensen got young girls of seventeen, eighteen; but he ruined their quality by, as we say, "oiling" them up.

Contrivance, Arrangement, and Simulation

Teiser: You were mentioning Wynn Bullock. And he's used nude figures--but not for themselves, as I remember.

Adams: Well, there's some kind of a complex situation with Wynn. Mind you, Wynn is one of the great people, one of the finest men I know. He's just a marvelous human being. Lots of his pictures have bothered me because they are mannered. And I'd like to clarify that. Perhaps the word is "contrived." Now "contrived" has got a bigger meaning, in the sense that if I'm going to do an advertisement, I have to contrive the situation.

Say I have a model and a dress. I'm thinking of Anton Bruehl's studio I visited years ago in New York. He was doing a picture for, I think it was, Lipton's Tea. And the model was a quite beautiful woman in a taffeta dress in a very elaborate setup with a silver tea service. And she was just sipping this tea. And of course the lighting and everything was just beyond belief. It was entirely contrived, and yet absolutely sincere.

Now, contrivance in another meaning is when you "monkey" with things. Such contrivance would be when a nature photographer takes along a bunch of azalea branches and puts it in a place for decorative effect where they couldn't exist.

Teiser: Suppose he put it in a place where they could exist?

Adams: Well, then you say--all right. Yes, yes--it's a moral, ethical problem, and that's very flexible. You brought up a good point. If the final result looked completely plausible and was real--all right. But it's a very delicate thing; very hard to put your finger on.

The arrangement is one thing, but the contrivance--I know, I'll just say--one of Bullock's has an old building and back of a window screen is a nude. Well, for me, nothing happens. I mean, he's trying to tell you something in a literary sense, or he's probably having echoes of an "art" experience (art in quotes). It's very hard to discuss--I can't quite put my finger on it. He has a picture of a forest in Florida, and there's a little baby lying down in the ivy.

Adams: Why? You see, I ask myself why. It's a beautiful photograph. There's one that he has of a little child sitting by a stream in an enormous forest, and that's a very extraordinary thing. In addition, it is something that could happen. He may have contrived it or arranged it by getting her there, but it is something that could occur. But the little baby lying down in the ivy is a questionable thing for me. And the woman behind the screen is also questionable. The woman lying on the bed in the room is not. That's something that's completely plausible.

You have no idea how many thousands of photographs are made of nudes lying on beds--with babies, without babies. [Laughter]

Imogen [Cunningham] has one of the great images--just the unmade bed. There's nothing on it or in it, but it's a very exciting photograph.

So there's a very delicate definition here between the real and--oh, the word that I'd like to use there is the "simulated." Now, to simulate something is, I think, perfectly all right, because you begin with reality and you're simulating it. You're trying to get a re-creation, a simulation of this thing. And therefore it has neither good nor bad connected with it. Arrangement is arbitrary. Contrivance has either good or evil connected with it--contrivance is probably a 75¢ word for "posing." When I show my picture of Clarence Kennedy, who is in profile, it looks like the most obvious pose in the world. But I say: I did not pose him. This is the stance he takes when he's listening to somebody. In this case, he was listening to his wife telling him what to get when he took me downtown, because she wanted some groceries. He was just listening, but he always put his long finger behind his ear.

Now, superficially, it looks as if I've said, "Come on, Clarence, let's do a little pose--you know, something funny," but it wasn't that way. That's the way he was when I made the picture.

But the separation between the real and the contrived, you see, is very delicate.

Once Edward and Charis [Weston] and I were on a trip. Edward was madly photographing--we were near Death Valley. And Charis saw an old boot. So she closes her eyes and she kicks it. Then she goes over and looks at the boot again. Then she gives it another kick. My god, it then looked pretty good. She said, "Edward, there's something here." He looked at it, and he made a beautiful photograph. Now, it was no more accidental for the boot to be there than where it was originally, except that it had been displaced and then had been selected as reality and called attention to as a "found object." And I don't think Edward ever knew that Charis kicked that boot. But

Adams: it just landed right in some sagebrush and some rocks and looked perfectly normal. Before, it was sort of cluttered; it was difficult to make a composition of it.

Now, is that right or wrong? If he had kicked the boot, then you'd have a half-way point. If he'd taken the boot up and put it very carefully down, and sand around it, and carefully arranged it, then you would have contrivance. So you see, you have an ethical point to ponder on.

On the other hand, suppose I have a perfectly beautiful composition of rocks and there's a beer can in it. I think I'm privileged to remove the beer can. But some purists say, no, I shouldn't even do that. In other words, I'm manipulating; it's no longer a true found object.

Teiser: Those are people who were born before Kleenex.

Adams: Yes. Perhaps you have been down in the desert, like Barstow, Red Lake, some place, you know where the garbage dump is just an open dump, and the desert wind had taken everything on the ground and blown it over miles of desert and every bush had Kleenex and papers and things hanging on it! This in itself is an extraordinary phenomenon, and if somebody from another planet had landed there, he would have found it of the most extraordinary significance. What is this substance that's on the bushes? I regret that I didn't record that as part of the desert phenomena.

I do have a [photograph of a] garbage dump at Manzanar, though, that I never thought of using, but I could now.

Meaning, Shape, and Form

Adams: My picture of the statue at the Long Beach cemetery, with the oil derricks in the distance, was done as a quasi-surrealistic thing. I just saw the improbability of this weeping angel and the oil derricks. It had no definite meaning; this is just a juxtaposition of opposites. Now, with the present pollution situation, it takes on another meaning!! People read into that all kinds of things. I'm even thinking of putting it in my Portfolio Seven just for that example. It was done for one reason but is "read" today for another. I'm proud of the photograph. But the meaning of it to me when I did it was just the sudden shock of the juxtaposition of the statue against the oil derricks, without any thought at all of pollution or anything else. And now when you see it, you may entertain a totally different meaning. Now if you saw the Angel of Death in front of oil

Adams: wells, you'd immediately think of environmental disasters, and so on. And I'd like to make that point clear; it shows how expressions and meanings can be manipulated over time.

I'm a heathen, and I look at many of the old master paintings and I get dismally tired of the Annunciations and the Resurrections and such things. But then you look at them abstractly--what do they do? Of course, they're all doing about the same thing, but a few of them always stood apart. A few of them were, I think, very inconsequential, but have become famous because of their period and associations. But to me, with my admittedly meager experience, the most magnificent religious expression of the theme is at the little santuario of Chimayó, New Mexico. The primitive Penitente paintings there are so absolutely beautiful that I'd much rather look at them than any Raphael or any conventional painting. Now, there are probably all kinds of things like that all over Europe, by the million, but these really hit me.

The Birth of Venus struck me as being absolutely tremendous, and the El Greco paintings. I get very mad when people tell me El Greco painted that way because he had an astigmatism. I think he was a stylist; I think he just did this thing of certain elongations for emotional reasons.

We're getting very far from photography, and I'm getting into a domain that I'm really no authority in.

Teiser: Well, as it relates to your photography, which of course it does--

Adams: Getting back to the idea of the difference between shape and form, the external world is nothing but a chaotic infinity of shapes, and the photographer's problem is to isolate the shapes, both for meaning and for their inherent potentials to produce form within the format of the image. And I've had terrific semantic arguments; people talk about natural forms, and I'd say, "Form is a product of man's mind and concepts, and shape is a phenomenon of nature." And the function of the artist is to develop configurations out of chaos, and especially so the photographer. You see, a painter can have myriad experiences and draw all these things beautifully together, without regard for their real time or place, but the photographer's got that camera and lens and that one film, and the maximum has to happen when that shutter clicks.

Time and Reevaluation

Adams: I think maybe what happened after f/64 is interesting and deserves a little more study. We all kept on. Imogen [Cunningham], as you know, is something in her own. She's always been, I guess, one of the most diverse people. The others somewhat faded from the scene. Willard [Van Dyke] went into movies. Of course, Edward Weston kept on, there's no question of that, and Brett is doing extremely well. Henry Swift and John Paul Edwards faded out of the picture.

Perhaps, for maybe a decade, the f/64 wasn't too important. It had done its job; it settled, and now it's coming back. It's like what happens with any great artist. You take Edward Weston. He died and there's a slump; now he's coming back ferociously on the preciousness of his remaining work. And I can guarantee that there will probably be quite a long period wherein he becomes a legendary figure, and then people will begin to discover him as Clementi and Mendelssohn did Bach, and there will be a powerful revival. I think that will probably happen with every fine photographer and artist. After their death you'll have a kind of surge of evaluation--get what you can and get what's left. And then there'll be quite a long period, maybe a whole generation, where his work may not have much meaning. And then stylistically, it will reassert itself: just look at the history of Bach.

You remember that Beethoven had a piano that didn't permit bass octaves. I know; I played on one of the pianos--an 1812 instrument, an instrument that he used, or a close serial number to it. It was owned by the people that were formerly very important in Williamsburg, and she was a fine pianist and musicologist. And this piano was in mint condition; you'd play on it and you'd hear it was beautiful. But, compared to what I've got over there--a 1924 Mason and Hamlin grand piano--there was little comparison. This was a time when I could still play, so I remember. There wasn't space for many of the octaves placed in later editions of his piano music.

So there was a development with the big piano and its modern keyboard. And then Beethoven was reedited to include the octaves.

Teiser: It's almost as if a new dimension was found in photography which could put a negative onto a different plane than it is now.

Adams: Well, don't think that you're just making conjectural remarks; the thing is possibly quite true. Now we have holography. And this is a very complicated thing, and I don't think I can describe it. Holography gives three-dimensional effects. Using it, you might achieve another interpretation entirely from any negative that I have now.

Teiser: That's a fascinating possibility.

Adams: That is a reality. It is expensive and complex. The first color images were made many, many years before we ever had a color print or transparency, but they were seen by iridescence. And the silver grain responded at different wavelengths and therefore would respond to a different columnated light coming upon it, and you would get a sense of color. So you see, miracles have always been with us.

Now, holography is something totally different. Some day that may be very important; it creates the illusion of the three-dimensional image. But still it's kind of crude and extremely complicated and extremely cumbersome, using laser beams. But there is always this possibility of making an integrated analysis of the rotation of the silver grains. It would be a random thing, and concern billions of grains practically in every place, but you might get a feeling of a dimensional quality. You might even get a feeling of color. But you wouldn't do it with one grain; you'd do it with a million, a billion, a trillion grains, you see. That's where the computer would come in.

Teiser: Sounds like a time machine.

Adams: Yes. In fact, I just read an article in Science today of the reversible time. A theory has been proven in the domain of sub-atomic particles; they move forward and backward in time. This is mathematical and extremely complex. Nothing to do with ordinary experience.

The Photo League and Politics

Adams: I think we discussed the Photo League, didn't we?

Teiser: Not at any length.*

Adams: Well, that's important. I think we could end with that tonight. It was primarily a film [motion picture] group before the war, and it was quite important. It was always avant-garde, socially and artistically.

Shortly after the war, it became very active with still photography. It was dedicated to the contemporary scene. There were some very fine photographers in it--Barbara Morgan, Beaumont

*See p. 49 and other references as indexed.

Adams: and Nancy Newhall, myself, Strand. Strand was one of the leaders. There were some shows in the East, and I had one show at the San Francisco Fair [Golden Gate International Exposition] in 1940.

At any event, in the late 1940s I received a call from Barbara Morgan who said, "I think you ought to know what's happened. The Commies have taken over the Photo League's board of directors." She said, "I don't like it, because I joined it as a photographer, not as a politician." You know, so many organizations had gone that way. You'd join a photographic society and find out it's something in support of the Communist party. In this case, then, they got a photographer in as prime director of education who was a well-known member of the party. And Barbara said, "I'm getting out, and I don't want anything to do with this; I'm liberal, but I don't want to be identified with the Communist party." And I said, "Neither do I."

So I called up my lawyer and asked, "What do we do? I have had no direct experience, but I'm warned that there's a political take-over in action." He said, "Well, write them a letter requesting information on the trend. Are they to continue as a photographic institution or grow into a political institution?" And, with the temper of the times, he advised me to send a copy to the FBI, which I did.

I got no response at all, in fact, more adverse reports, so I resigned. I sent a letter saying, "Not having had a satisfactory answer to my question, I feel that I really shouldn't continue as a member. So I respectfully submit my resignation." I sent a copy also to the FBI. And it was the most fortunate thing I ever did, because I was cleared later from being associated with a definitely Red-oriented group.

Now, I'd like to make it clear: if it were a Republican-oriented or a Democratic-oriented or Red-oriented organization, it would have the same effect. I mean, I think the Communist party has an equal right to exist along with the Nixon party. But I don't want to be associated with those political aspects. And when I came in for a final clearance, which was through the navy and Polaroid to do some secret stuff, the FBI told me that the copies of these letters they held are what made clearance possible. They said, "You clearly stated your point of view."

Several very fine photographers--a couple of them got jobs with the Department of Education and went over to Europe to photograph and were turned back at the docks because they were members of the Photo League. Of course, this was part of the McCarthy catastrophe, and we had to fight that. They were the most innocent people in the world; they didn't know what was going on politically. They just wanted to practice and help the arts.

Teiser: This was a New York based organization, was it?

Adams: Yes.

Teiser: Who started it?

Adams: Walter Rosenblum, Paul Strand--I don't know whether Walker Evans was in it or not; I doubt it. It was a considerable group of New York photographers, which was a special breed. They're mostly in journalism. I don't want to be quoted in the sense of accusing people by association. But, it was quite a sizable group. Berenice Abbott I think was in it. I got in it, and Willard Van Dyke--people who were interested in joining organizations that would do good, like the Group f/64.

Harroun: It didn't start out political?

Adams: Oh, no, it started out as a--well, it was more or less dedicated to the American scene, because you don't have much else in New York. The American situation, the social scene, I should say. And you realize people who are living in New York and places don't know much else. If they see a tree, it's a Central Park phenomenon. I mean, they live in the ghetto, they live in the center of the city; their whole life is people. Helen Leavitt was another one--did marvelous photographs of people, but the orientation is totally different from out here.

It was an organization that commanded considerable respect and was the only one of its kind in the country. But of course we cannot forget that hideous McCarthy period, when everybody was accused of everything. George Marshall was in the Civil Liberties Congress, which was very definitely a Commie organization, and he was too naive to realize that. He was a man of very considerable means, and they got him in. This group was brought up before the Senate, and it was pretty grim, because most of the leading communists in the country were in it, and George was the treasurer. (George was the brother of Robert Marshall who founded the Wilderness Society--very fine and wealthy people.) And the Senators demanded that he turn over the books. And he said, "I cannot do this without the approval of my board of directors as a matter of principle."

"You refuse to do that?"

"Yes."

Well, he was convicted of contempt of the Senate and was sentenced to prison. Went to the Philadelphia Farm I think it was for six months. He really went through hell. An extraordinarily fine man. He was a man of great principle. The Senate had really

Adams: no jurisdiction. This is a matter which I do not believe has been cleared yet in law. But they had no right to demand that he submit the books. He said, "If my board orders me to do so. You order the board, and they'll order me; otherwise I stand in contempt, gentlemen." It was really quite a moving situation, and it was absolutely undemocratic and absolutely wrong.

And the photographers--we've had a lot of troubles! Strand had to move to France or he would have been in jail, because he was definitely a communist. Having money, you know, he could do what he wanted. He was much luckier than others.

You're always confronted with sacrificing yourself on the alter of political belief or being rational and doing what you have to do as an artist, irrespective of Nixon, or McCarthy, or Roosevelt or what.

I'm very unhappy about the contemporary situation, because I think if something goes haywire, which it very well could, we'll come under a very strict surveillance.

Jack Anderson's comment on the FBI when this new man, [Patrick] Gray (who apparently is a real dumb jerk), took over: "We have no personal files." And Anderson had photostatic copies of the personal files. Now, take the young photographer--what is he going to do in the world? Is he going to go out and photograph rocks and trees, or is he going to really pitch in and do something for society? I would admire the one who would pitch in and do something in the sociological sense, providing he makes moving photographs.

I tell you, a typical thing was that [Ralph] Crane, I think he was, of Life--a whole lot of pictures were made of troupes departing for the war. This was back in the early days. And oh, they had fanfares and they had soldiers and all this stuff. And Crane made a picture of a wife and daughter in the back of the car--they had just taken their husband and father to the embarcation center.

That was one of the most incredible photographs I've ever seen--I mean, just the expressions on these people. And it was a beautiful photograph. It was beautiful tonally and compositionally. And I've been trying to find that, and no one knows anything about it; Life can't find it, and so on.

But there was the whole creative tragedy of the war, just in this particular photograph of these two women, you see. And all the other patriotic bombast was--if you read into it with a literary sense, you thought, "Well yes, they're going over to be shot up; too bad." That was bad. But the whole thing was summed up in this extremely perceptive photograph. And in that way the perceptive and

Adams: beautifully controlled and aesthetically managed image has the greatest power. And that's where Dorothea Lange stands head and shoulders above all the rest of her colleagues, because she injected that quality of art and sensitivity.

Working with Dorothea Lange

Teiser: I remember her photograph of shipyard people had that same something.

Adams: It's not known who did many of those photographs--she and I worked on that together. The one of the people coming down, the whole crowd--that was mine ["Shipyard Construction Workers, Richmond, California," 1942].

Teiser: Oh, it was!

Adams: And the picture of the Negress sitting in front of the trailer camp housing in the mud--that was mine. And the trailer camp children also were mine.

And then, helped by her son, she got some pictures in a bar, which I wish I'd done. But that doesn't mean much difference. We did it as a joint thing, like we did the story on the Mormons. What was Dorothea's idea, what was my idea, whether she or I did the photograph--what difference does it make? Those really were joint projects, and I imagine it was a fifty-fifty result.* It was a privilege to work with her, but it was difficult. Even at that time she wasn't well, and she'd overdo and she'd have medical problems.

I don't regret my life at all. It's been spectacular in many ways. And you know, working with people is rewarding. Some day I'll give you a story of my invasion of the South with telephone advertising people. That would be another story.

Teiser: Well, I'll write it down to bring up later.

Adams: Some of it, if I told the truth, you couldn't even print.

[Interruption--visitor enters]

Adams: Ah, this is Dick Julian, one of my prize students, a very fine photographer, a very fine electronics engineer. He's made me two

*See also other references to Dorothea Lange as indexed.

Adams: gadgets, timers, which put me in this enviable world of technological superiority! And he's a fine photographer, which is the most important thing. I'd like to show you his portfolio.

[End Tape 7, Side 1]

Early Visits to New Mexico

[Interview VI -- 26 May 1972]

[Begin Tape 7, Side 2]

[Virginia Adams participated in this interview]

Teiser: I can start today by reading you some dates that I have here that maybe will recall to you your early trips to New Mexico. These are mostly from Mrs. Newhall's book.

Adams: Yes.

Teiser: Some time in 1927--

Adams: That's the date I went.

Teiser: --you went first to Santa Fe with Albert Bender.

Then in 1928 you went twice, and then in 1929 in the spring you and Mrs. Adams went, and then I don't know--

Adams: Well, she [Mrs. Newhall] didn't get all those details in those days, because it was pretty complex. But I can start it off by saying that Bertha Damon, who was then Bertha Pope, was quite a literary figure. You remember, she's written really delightfully. I think her first book was A Sense of Humus, which was on gardening. It was just marvelous. And the other one was Grandma Called It Carnal. That was marvelous too. She's a great stylist. And she was a great friend of Witter Bynner's.

So Albert Bender said, "Let's us go down in the old bus and see Bynner and the other people down there." Bertha and Albert and I drove down in his Buick, which I think was a 1926 coach--terribly good automobile, probably still running. And in those days the roads were simply ghastly. The highway over to Tehachapi, that wasn't so bad, but when you got over to Mojave--from Mojave on east it was all "washboard"--just dreadful road. Dust. You know what a washboard road is?

V. Adams: That was the time we took Ella Young?

Adams: No, I'm speaking of going there first with Bertha. April 1927-- that was the first trip.

V. Adams: I don't remember.

Adams: [To Mrs. Adams] She got that out of Nancy's book.

So we arrived in Santa Fe and went to the De Vargas Hotel. This is very poignant--I met Bynner for the first time in the men's room.

V. Adams: You mean that's where you were to meet? [Laughter]

Adams: We arrived in a state. It was snowing and a dust storm, so the snow was literally gray. I've never seen anything like it since.

V. Adams: What time of year?

Adams: April. So then Witter said, "Well, you're all coming to dinner," and he gave us the address but he didn't give us directions.

Bertha was sure it was the north side of the Santa Fe River. I didn't know. So we went up there and got lost and kept calling on people, and these people only spoke Spanish, you know--it was a terrible time. Finally we got back to the hotel, and Bynner said on the phone, "I didn't tell you. We're first meeting at a party on Canyon Road. So you go there."

So we went there and there was a real wild drinking party, and a lot of young people had passed out--

V. Adams: That was quite a beginning. [Laughter]

Adams: In those days Santa Fe was really something--very exotic.

And then we got to Bynner's place about nine o'clock, and there was more partying, and then about ten o'clock he had this dinner. Well, poor Albert wasn't used to that kind of stuff at all. Bertha was, but she was furious. The only reason I took it, I guess, was that I was young.

So we had several riotous days, and we met people--Mary Austin, Haniel Long, Arthur Davidson Ficke, Shuster--

V. Adams: Will.

Adams: Will Shuster, and the Cassidys, Gerald and Ina Sizer Cassidy, and quite a few others that were writers and artists and friends of Bynner and Bertha.

And we toured around a bit. We went to Taos, but we didn't meet Mabel [Dodge Luhan].

Teiser: You did not?

Adams: No, not that time. She was in Europe or something. And then we came home.

V. Adams: Didn't you have a trip across the desert, sort of just across the country somewhere, in Albert's car?

Adams: Oh yes, that's interesting. We went to Grand Canyon on the way. And we left Flagstaff, and the road was terrible. So we stopped some shepherd by the road, and I said, "Can I cut across here?" He says, "Oh, go right across." How we ever did it I don't know, but we got that car across about eight, ten miles of Arizona desert without any mishaps. It was a foolhardy thing to do--just absolutely ridiculous. But I didn't see that it was much worse than the road. We cleared everything. Had a little trouble getting on the road on the South Rim, though. We had to navigate for a mile or two to find a place where we could get down the bank, see. And I had to get out and move some logs, but we made it. [Laughter] Then we went to Grand Canyon.

V. Adams: Who else was there with you?

Adams: Friend of Bertha's.

V. Adams: I can't even think who it is.

Adams: I can't even remember the name. I think Albert was very jealous--

V. Adams: He thought that he should have the center of attention, which he should have.

Adams: It was very funny--one morning I left very early to get a picture, and I looked down from (I forget which point it was--near the big hotel, I guess), and I saw this little figure walking around in circles out on this sort of an esplanade, quite a way down. It was Albert. He was pacing in a circle. He was depressed because he thought that this guy wasn't worthy of Bertha. I don't know how confidential to be about this, but it was very funny.

Anyway, we got home safely. I can't think of anything else that happened.

Teiser: How long a trip was it?

Adams: Two weeks.

Teiser: Did you do all the driving?

Adams: Yes. Albert didn't drive.

V. Adams: The bounding Buick. It bounded that time, for sure.

Adams: Bertha didn't like driving. I could take it hour after hour, but those washboard roads were unbelievable.

Teiser: Do you remember what your first impression of Mary Austin was?

Adams: I met her at a party. She was rather grim, very nice, to me at least--didn't like Bertha.

V. Adams: She didn't really like most women, especially here was Bertha, who had done some writing. She wanted to be at the center.

Adams: At any event, she saw some of my pictures, which I'd taken down there.

Then the next trip is when we met the Applegates, Frank Applegate and his wife [Alta], and Mary Austin again.

V. Adams: Was that the time we went together, or were you there another time after that? You went to New York on the train and stopped off.

Adams: That's right. Several trips there, we went by train.

V. Adams: Yes, because once was just before Christmas, and you took some pictures of the snow on the adobe house.

Adams: Bynner's home.

Teiser: That must have been 1928. According to Mrs. Newhall's book, you were there in April and then in November 1928.

V. Adams: Well, that could be. Because, you know, we got married in January 1928, but I had invited people to Yosemite. I had a household there to work on. And you were going east. And we didn't go until the spring of '29, when we went with--

Adams: Yes, Ella Young.

Well, there were several trips, and at that time we arranged to do the Taos book, and a lot of pictures for the Spanish-Colonial Art Society.

V. Adams: Which Mary Austin was very active in.

Adams: And, of course, I was staying with Bynner in that beautiful house. But Bynner would party until one in the morning, and then he'd work with his secretary.

V. Adams: He was stimulated, I guess.

- Adams: The party would go until four or five, and he wouldn't get up until two the next day, but I'd have to get up around dawn to get pictures!
- V. Adams: He [Bynner] would go out and work in the early morning in his garden, then retire. He often did it after work with his secretary, at seven and eight. Then he'd go to bed.
- V. Adams: Yes. His day was over--I mean, night was over.
- Adams: He'd get up at two or three to attend the affairs of the day. Cut his coupons and order the meals. [Laughter]
- V. Adams: He had a wonderful cook, Rita. She was with him for many years.
- Teiser: Who was his secretary?
- Adams: He had several. I forget just who it was.
- V. Adams: Was his name Gorman--the one that we knew first?
- Adams: There was Gorman; then there was McCarthy--a wild Irishman, terrible!
- V. Adams: Then there was the last one. He died before Hal [Witter Bynner] did, and Hal felt very badly about that, because they'd shared so much. He'd built a whole addition to his house that was for this young man, and then he was gone before Hal. I don't remember now.
- Teiser: Did you know Witter Bynner when he was in Berkeley?
- Adams: No, I never knew him at that time.
- V. Adams: Not until he came back and we were at Cedric's [Cedric Wright's]. That must have been '28, because we were living at Cedric's house on Etna Street, Berkeley.
- Adams: I didn't know him before I went to Santa Fe.
- V. Adams: Yes, we met him there.
- Teiser: Frank Applegate--there's an awfully good picture you made of him that's in The Eloquent Light.
- Adams: Oh yes, with a cigarette ash.
- V. Adams: Oh, he was great.

Adams: He was an artist. Of course, he was ill--I think he had TB or some such disease. He was from New Jersey, and he came out to New Mexico. He was a pretty shrewd man. He built adobe houses to sell them. Then he would study the santos--he had a great working knowledge of the bultos and santos. He would acquire them and restore them, and that has driven the museum people absolutely wild, because the restorations are confusingly good in many instances. He had no idea of the "museology" of what he was doing.

V. Adams: You know he was a painter. If he could put a little more paint on something--pick it up a little bit--

Adams: He'd retouch it and fix it up--put in a little new gesso, etc.

V. Adams: But he first came out from New Jersey and was sent to the Hopi country. They were having trouble with their pottery. It was too fragile. And he apparently knew something about clay. And they lived in one of the Hopi pueblos for, I imagine, a year or so. And I said to his wife, Alta, "What did you do for the bathroom?" She said, "Fortunately, it was an old house that had another room that nobody used, with a dirt floor," so they did just what the cats and dogs do. They had one daughter who was just a little bit of a girl.

Then they went on to Santa Fe.

Adams: But he was quite successful. He had one of the most beautiful new houses--that is, in the real pueblo style. He added to a beautiful old adobe; everything was absolutely authentic.

V. Adams: We'll have to show you some of the pictures.

Adams: He really knew what he was doing.

V. Adams: And Ansel took a lot of pictures of furniture--chests and things--for a hoped-for book that Mary Austin and Applegate were going to do.

Adams: I'll have to remind Ted Organ [Ansel Adams's assistant] that one of my priority projects is finishing the early New Mexico pictures for E. Boyd of the Museum.* And why they don't send me a bomb in a package, because of my delay, I don't know.

*Added by Ansel Adams in July 1977: "I was doing a series of pictures of Spanish-American art and furniture, etc. for Mary Austin and Frank Applegate. That folded, and E. Boyd asked for the pictures I made. She died a couple of years ago [30 September 1974]. I suppose the negatives still have value."

- Teiser: Have you promised her a show?
- Adams: It isn't that. It's all these things that aren't fine photographs, but they're invaluable records.
- V. Adams: They're records, because this was 1927-8-9.
- Adams: [To Ted Organ] Ted, we ought to wash them and refix them and reduce them--many of them, and really make--
- V. Adams: When's he going to have time to do this?
- Adams: Oh, he'll have time.
- V. Adams: Remember, you promised that he could photograph some of my Indian baskets for records, but he's never going to have time to.
- Adams: That's another story.
- V. Adams: I know.
- Adams: You're on tape now. [Laughter]

Indian Art and Architecture

- Teiser: Let's at least note that you have a fine Indian basket collection. Back to New Mexico--
- Adams: Well, New Mexico's a very complex mystique, and I reacted strongly to it. One very interesting thing is that I'm really a heathen. My family I suppose were Episcopalian originally, but half of them became converted Catholics. Neither my mother or my father or my immediate family on that side had any direct interest in religion at all. I never went to church, and Papa was a constructive heathen, and I hope I am too. But the dichotomy of the situation is that always the primitive Indians' Catholic life, their works of art and their moradas, were profound in their emotional effect on me, and a lot of my photographs relate to cemeteries and some of those beautiful frescoes and objects. I look at it as a kind of folk art--a transcription of intense feeling of people. (And I would probably do the same thing in Hawaii with the Buddhists.) As far as doing it from the point of view of a Catholic, people don't understand why I should be interested. And of course the people down there didn't like you to photograph their old, used-up cemeteries because they're not taken care of. Now some are taken care of, which is ruining the "mood."

Adams: The Mormons, for instance, deeply resented our photographing old barns and old things, because they were trying to raise everything up to the new qualities and standards. But the people down there in New Mexico have really deteriorated now tremendously, and these cemeteries are a kind of desolation. The women can't mud the adobes any more. You used to see them out there putting it on by hand. Every year they used to go over the buildings. They can't do it any more, so they have to stucco these buildings. They put tin roofs on them. (That beautiful church in Hernandez in my "Moonrise" picture now has a tin roof.) But there's nothing else they can do, because there is no way to take care of it.

With adobe structures, it takes a constant putting on of mud. That's what gives it its peculiar texture and shape. The people who fake it, they do it with a brush, you see. When they use the mud, they just go over it and over it--filling in the little cracks.

V. Adams: When Georgia O'Keeffe redid her house, she was able to get knowledgeable people, and the women really did do it the old way.

Teiser: It was always woman's work, wasn't it?

V. Adams: Yes, that was. The men, I guess, made the adobes, dried them and stacked them up, but when it came to the plastering, men and women worked at it. And the Mexicans did the same thing.

Adams: But there's an interesting thing, that some of the people were doing that with cement. They'd get a very careful cement stucco and give it the right color and then put it on by hand. It isn't exactly the same but it lasts longer--

V. Adams: Yes, of course it lasts.

Adams: Adobe is built with straw to hold it together. It depends on what kind of adobe soil is available.

V. Adams: One of the things that was so interesting to me was that they could analyze something about the flowers and things that were growing at the time an adobe brick was made, because they used this straw for the stuff that made it stay together. And they could work out the flora 'way in the early days.

Adams: But now they use, of course, the modern adobe, and many houses are being built with that. But that is usually sized with a binder and it makes it very strong.

You see, some of these places have serious trouble because of what they call the "main vigas"--the cross beams. Most of the adobe buildings were really small except the churches, and there

Adams: they had trouble. But they had enough sense to make a wood lintel or a brick coping across, I guess you'd call the top of the walls, because the heavy beam would gradually compress the adobe. And so they founded what they called the "Spanish colonial" style. They were built of adobe, but built very trimly--very accurately--with a brick coping, and then the beams rested on that.

And we saw Senator Cutting's house. It is a great classic colonial house.

You see, the real adobe is what they call the primitive, natural adobe. Then you have the colonial type, which is for more sophisticated people, who really did design the architecture. But they're walled-in adobe, and very trim, and the windows have the colonial cut. And they're still beautiful; the walls are about five feet thick.

V. Adams: Have you been inside the Carmel Mission?

Harroun: Yes, but not recently.

V. Adams: There's the same feeling there.

Adams: Yes, but that's been very carefully restored.

V. Adams: They have restored that, yes, but--

Adams: It went to pieces fast before Harry Downie took charge of the restoration.

I learned a lot about adobe! Frank and I would tour all over the region. We went to moradas. I have a beautiful interior of a morada. A morada was a penitente chapel. The penitentes were--were they actually excommunicated?

V. Adams: They were at one time, yes. Yes. What happened was that the Catholics went away from there, and these little village people kept on with their religion--

Adams: In their own way.

V. Adams: In their own way. And this penitente thing that gets talked about, where they whip themselves and all--the Fathers when they came back strongly disapproved of that.

Adams: The Fathers were German Jesuits. Let's see, in the first days they were Franciscans and very sympathetic to the natives. But when the German priests came (I think they were Jesuits), they ordered the old relics thrown out; said they were heathen relics! And they imported those hideous plaster things from Rome. So we would

Adams: go into strange places and find beautiful old things, most of which have now been sold or put into a museum. Once in a while there are some remaining, like the altars at santuarios. Many were the most beautiful things I've ever seen. And all too often there is an Italianate picture of the Virgin--or statue--with pink cheeks and all otherwise terrible. But they'd dress them up and put all kinds of geegaws around them.

V. Adams: It remains very close to their hearts, as I think is true with all peasant groups now.

Ella Young

V. Adams: I want you to talk about the time when Ella Young went down with us to Santa Fe.

Adams: Well, that's really a story!

V. Adams: There's an interim there, of course. But while we're talking about that, and before I go and do other things, let's talk about--

Adams: You can cut in on this.

V. Adams: Yes.

Adams: Well, Ella Young was an Irish poet, also an Irish revolutionary. She was a doctor of jurisprudence; she really was a lawyer. She was also a very mythical-minded Irish lady who was always seeing little people--wonderful stories about that!

V. Adams: Her father I think was a minister--not Catholic, but a minister, of whatever the faith was. And she got away from that, and she lived in Dublin with Maude Gonne, who was a very fine actress and a great friend of the Irish writer William Butler Yeats. I think she was his lady friend.

Anyway, she lived there with them and they actually were active in that 1916 uprising. Now I don't know that the public has ever known much about it. But she told me one time that they did have guns in their home. I think she was kind of a helper to this Maude Gonne.

Adams: She barely escaped; she got out of Ireland.

V. Adams: And I think whoever was her boyfriend was killed, but I never knew who it was.

V. Adams: But one time she took us with her when we went to lunch, with the Monsignor at St. Patrick's in San Francisco.

Adams: Marvelous man.

V. Adams: Yes, a charming person, and she'd known him in Ireland. And we all had lunch together. I felt so sorry for him, because the old lady that kept the house for him really didn't keep it clean.

Adams: Dusty, you know.

V. Adams: It really was. But it was wonderful for Ella Young to visit him again, and they talked a little bit about it [the 1916 uprising]. But if you ever have a chance to look up something about Maude Gonne--apparently she was very beautiful and quite active in that revolutionary movement.

Adams: She wasn't one of the women in my life. [Laughter]

V. Adams: No, no.

Adams: --our lives. I must make this very precise.

V. Adams: But anyway, this Ella Young was a marvelous person.

Adams: She wrote Gaelic fairy tales.

V. Adams: I'll show you some of her books.

Adams: She always wore purple veils or scarfs. And we always used to meet at Colonel [C.E.S.] Wood's place. At Colonel Wood's eightieth birthday--

V. Adams: --which was your fiftieth.

Adams: --everybody got cockeyed on the Colonel's wonderful red wine, and she read the benediction in Gaelic wearing a purple scarf, hanging on, as I remember, to the top of an Italianate chair. She could, of course, speak beautiful Gaelic. She would declare that she saw all the little people. And she practiced all kinds of little rituals.

Now, we decided that we would go to New Mexico. And I have pictures of you and Ella and others taken in New Mexico.

V. Adams: We had to wait until after Albert Bender's St. Patrick's Day party. We left the next day and picked her up at Halcyon, which is down the coast, below Pismo Beach.

Adams: Where the elder Varians lived. It was a theosophy colony.

We drove to New Mexico and had a couple of close calls. They were rebuilding the road near Taos and it caved in.

V. Adams: Well, wasn't that coming south from Taos?

Adams: Yes. Ella--when she got to the Arizona border (she always wanted to know when she entered a new state)--she left the car and poured a little wine on the ground.

V. Adams: And at every lunch on the trip we offered a libation to the gods. We'd have wine and cheese and other things in our lunches. She was lovely!

Adams: For a practical man like me, it was a little screwy, but it had a great charm.

V. Adams: Well, it was fun. We were young and this was fun!

Adams: So we got along fine down there. But she was very proper. Of course, Bynner immediately kisses every woman who shows up.

V. Adams: She didn't want to be kissed?

Adams: She refused to be kissed by Bynner.

V. Adams: Well, I don't blame her.

Adams: "Oh, come on Ella, you're just a friend." "No! My resolution!" [Laughter] So Ella was the only one that was not "smacked." Everybody got "smacked," from six up to sixty-nine.

V. Adams: She had gone to stay with a friend of hers--some woman whose name I don't remember, some woman who'd been hurt in an accident and blamed the railroad--blamed somebody. She was suing like mad, and she was really very ill. She was living in one of the little old houses that were railroad houses--you know, in New Mexico--the typical ones--red brick and sooty yards.

Ella Young had told us that she would like to go and see Mabel Luhan, and she said, "I understand that if you get invited to Mabel's, you can stay."

Adams: You're in.

V. Adams: That's right. So we had been there a very short time. We were staying at Mary Austin's little house, and there was a party next door, and Mabel came. And I guess Ella Young was the one, wasn't

V. Adams: it, that the party was for--maybe she'd lectured or something--do you remember about that? Well anyway, it was through Ella Young, really, that we got the idea that if you were "in" with Mabel that you got to go to Taos. [To Ansel Adams] Go on, go on.

Adams: Well, Mabel was one thing, and Ella Young was another. Ella Young absolutely believed that New Mexico had little people, like Ireland. So she kept talking about the little people she'd seen. And Bynner was very skeptical of these things. I had a fairly open mind; all the Indians I knew are quite real, but I'd never heard of little Indian people. Bynner said, "Now would you describe to me just how they look?" And she did, and she had a most minute description. They had Hopi shoes, and Navajo pants and skirts, and Sioux headdresses. [Laughter] War bonnets; all of them had little war bonnets on.

Ella would talk, and Bynner was absolutely fascinated, because he felt that she had a great poetic quality.

Now, she was sponsored and protected, during the remaining years of her life, by Noel Sullivan. And you can tie in a lot of things of Ella Young through the Noel Sullivan history.

V. Adams: She was a great person, really; a very lovely person.

Adams: So one day we were up at Mabel's place, and O'Keefe was there-- Georgia O'Keefe. And let's see, I was sitting at breakfast with Mabel, and in came Ella with a blue scarf. And then a little later, in came O'Keefe.

So Ella said, "Well, good morning. How did you enjoy your walk?" O'Keefe says, "What walk?"

V. Adams: Aren't you getting it the other way around? Didn't O'Keefe say that to Ella?

Adams: Yes--I stand corrected! O'Keefe came in and said to Ella Young, "How did you enjoy your walk?" And Ella said, "What walk?" Georgia said, "I was up in my room and I saw you walking out towards the morada." And Ella said, "No, I didn't."

"Well," she said, "I saw you. You opened the gate. You closed it carefully, and you walked on towards the morada, which is about half a mile." Ella says, "I never did any such thing," and is looking a little bit dismal. And O'Keefe says, "But I saw you."

"Well, you didn't see me. You must have seen something, but you didn't see me." And Mabel was getting quite distressed; this whole thing was quite argumentative. But O'Keefe was quite sure.

Adams: And Ella said, "Well, it must have been my astral body." And then O'Keefe came back and said, "Well, I don't know what it was, but it was something!" [Laughter]

But this is the kind of thing that was going on all the time. It was all crazy as the devil, but it's funny.

Santa Fe People

Adams: So there was Marin and O'Keefe and Paul Strand--at Mabel's. That's where I met Marin.

V. Adams: That was later on.

Adams: I can't get the sequence right; these things are all telescoped over a few years.

Well, then Mary Austin fixed it up with the Taos governor through Tony--

V. Adams: Mabel Luhan's husband, Tony Luhan.

Adams: --fixed it up for me to come and photograph Taos--to do a book with her.

Teiser: They were very careful about who they'd let in at Taos?

Adams: Yes, they had an all-night council meeting and finally decided I could do it.

V. Adams: We did a book about Taos Pueblo. Have you seen that book? We'll have to show you, if you haven't seen it. It's a big book.

Teiser: This is the 1930 book, Taos Pueblo?

Adams: Yes. Mary Austin wrote the text. The crazy thing was, you see, that Mary Austin had it a bit on Mabel. Because Mabel had Tony as a chauffeur when she first came, and then she fell heavy for Tony. And it was no matter that Tony had an Indian wife. So there was some legal or illegal divorcement. Then Mary Austin suddenly moved in; she had to protect the Indian wife because of her avowed interest in the Indians. She arranged that Mabel pay alimony to the Indian wife as long as she lived. Of course, Mabel was a tremendously wealthy woman, so it couldn't possibly have affected her. [Laughter]

Adams: There's a marvelous story about Mabel. Let's see, it's "Mabel Dodge Sterne Evans Luhan."*

Well, Edwin Dodge was sitting in his club in New York. And somebody came in and said, "Guess what your ex-wife has done." And he said, "I haven't got the slightest idea. She can do anything." Well, she's going to marry a full-blooded Taos Indian." Edwin looked around and raised his head and said, "Lo, the poor Indian!" [Laughter]

When she married Maurice Sterne--everybody's dead now--she met him in Europe at a salon in Florence or Venice or somewhere, and they got married. And Mabel went to New Mexico on the honeymoon, and he went to Florida. [Laughter] So you get some idea of the whole situation involved in this thing.

Then Evans came before that.

V. Adams: She'd had one son, John Evans.

Adams: John Evans was quite a nice guy. Saw his house in Santa Fe. Of all the crazy things to build in the Santa Fe country, it's an English manor house, but that's what he did.

V. Adams: They came from New York.

Adams: Well, let's see. The Santa Fe experience was a very complex intermingling of work with Frank Applegate and Mary Austin.

Teiser: What was the original concept of that project?

Adams: It was to be a book on Spanish-American art and decoration.

Teiser: As a whole?

Adams: As a whole. It was very vague. There'd never been a real scholar involved. It was the first time I realized, I think, what the difference between the interest of a dilettante and a real scholar is. Because nobody was analyzing this. They'd say, "Well, there's a chest," and you'd go and photograph that--and nobody was really getting this project organized. That's what E. Boyd, who was an art history person with the museum, a really highly trained person, could do.

V. Adams: And quite a character!

*Born Mabel Ganson, she married successively Carl Evans, Edwin Dodge, Maurice Sterne, and Antonio Luhan.

Adams: Oh, she's marvelous, yes. There was Marie Garland--

V. Adams: Hamlin Garland's ex-wife.

Adams: She married Henwar Rodakiewicz--Polish; he's one of my oldest friends, and he's still living in New York. He's a creative cinema man.

And we had many parties out there at their ranch north of Santa Fe.

V. Adams: It's a marvelous place--

Adams: It's still there.

Teiser: How did all these people happen to be living around Santa Fe?

V. Adams: Because they liked to live in that country. It's just like people like to live in Carmel. It just does something to you--makes you happy to be there. But they have to have enough money to be able to live there, because you don't live on the country.

Adams: There are a great many wealthy easterners. It's an impossible place for a gringo to make a living, except a few bankers who can sure milk the native populace. But you had some very wealthy families--the White sisters from Boston, and the McCormicks, and any number of people came who had the means just to live. Witter Bynner was financially independent; Arthur Davidson Ficke made a fortune in Japanese prints. Mary Austin was probably one of the few really hard-working people who lived there--writing.

V. Adams: But some of the artists live there now by the skin of their teeth.

Adams: Yes. Of course, a lot of the good artists, they'd sell a few things there, but they'd send most of their work east. Like all the good artists here rarely show in Carmel. The Carmel Art Association has an occasional show for many of the few very fine artists around here, but some of them I've never seen.

Teiser: Was Frieda Lawrence still around?

V. Adams: She wasn't around when we were there.

Adams: I never met [D.H.] Lawrence; Lawrence was before my time.

V. Adams: Did you meet her? I never met her.

Adams: Oh, I met Frieda once. And then I met Toby--Toby's the name of the ear trumpet.

V. Adams: Oh, Brett! The Honorable Dorothy Brett, who had a trumpet named Toby.

Adams: She was deaf. [Laughter] But when she really became impassioned in discussion, she'd put the trumpet down in her lap and just talk to you perfectly normally. But if she was bored or something, she'd put this up and say, "What?" [Laughter]

V. Adams: She's still in existence, isn't she?

Adams: Oh yes, I think so.

The most wonderful group of nuts you can possibly imagine!

Teiser: You mentioned someone named Long?

Adams: Haniel. He was a writer and poet. I think he was a friend of MacLeish--Archibald MacLeish, but I don't really know.

V. Adams: He was a writer and he published things in the Santa Fe area.

Adams: And he also published in the East. But again, most of these people had income from outside. Of course, now Santa Fe is a big place, and lots of people can make money there, in real estate and stores and so on, but it still is not a real money-producing place. Albuquerque depends largely on science--NASA, you know, the Sandia base. And the farming, and the cattle and all that is really small family stuff still, isn't it?

V. Adams: Well, I don't know.

Adams: I don't think there are any great corporate farms, like there are in California.

Teiser: You mentioned Will Shuster--

V. Adams: Yes, he was an artist--painter.

Adams: Oh, there were so many I can't think of all of them.

Taos Pueblo

Teiser: Whose idea was the Taos book--yours, or Mary Austin's?

Adams: I think, frankly, it was mine. I mentioned it to Albert Bender, and he thought it was a good idea, and said to see if Mary would do the text. And Mary would do the text. And then, Albert got Grabhorn

Adams: to do the typography. And Dassonville, who was a photographer and manufactured, at that time, the finest photographic paper, which was pure silver bromide on rag paper, he was going to coat the paper. So we ordered a quantity from a New England mill, which was divided between Grabhorn and Dassonville--the same paper stock. And the only thing that we missed on was that the paper should have been soaked before it was printed by Grabhorn, because the paper was fairly smooth when it came, but when it was coated with the photographic emulsion and then developed, fixed, and washed, it took on a certain texture a little different from the printed sheets in the book. Apparently, the sheets differ in look and feel although they're both exactly the same basic paper. And that was before the time of toning, before the time we knew about two hypo baths. And some of these prints are not permanent, which bothers me very much--a few are "turning" a little.

V. Adams: The Book Club [of California] is kind of interested in the idea of republishing it.

Adams: Yes, it could be published--

V. Adams: Nobody has ever read this text except the hundred people who bought the book. It's a charming essay.

Adams: You'd have to just use a printing process that would simulate the qualities of the prints--probably right from the page.

V. Adams: The linen for the binding, the rust-colored linen, was dyed by Hazel Dreiss, and she made the binding and the end-papers:

Adams: The end leather, they call it.

V. Adams: It came from England.

Adams: No, from Algeria.

V. Adams: Anyway, it's very special.

Adams: Everybody was broke, and Hazel Dreiss called up and said, "The leather for the book's here, but there's a four-hundred-dollar bill, and I don't have it. Do you have it?" And I said, "No."

"Well, who's got that money? It will be returned if I don't pay it. So who do I call?" I said, "Albert Bender." He said, "All right" and sent the check (as usual!)*

*See also other references to Taos Pueblo as indexed.

V. Adams: He was a wonderful person.

Adams: He always came through, and he was not a rich man--he was well-to-do but nothing much above average.

V. Adams: He'd earned it in his insurance business; he'd worked hard.

Adams: He lived alone. But he was the most generous person.

Teiser: In Mrs. Newhall's book, it says he had a housekeeper who was a terrible cook.

Adams: Oh, perfectly awful.

V. Adams: Mrs. Ayres.

Teiser: Do you recall Anne Bremer?

V. Adams: That was a cousin of his, a very sweet person, I guess. I never met her. Did you meet her?

Adams: An artist--I met her once--very hazy recollection of it.

V. Adams: And then she died; he was very fond of her.

Adams: That was his great personal tragedy.

Teiser: Over how long a period did you photograph Taos?

Adams: I did it all in one year, I think.

V. Adams: That spring of 1929.

Teiser: All in one season?

Adams: I think I came back later and did one photograph. And of course there is in the book the great church of the Ranchos de Taos, which has nothing to do with Taos Pueblo and really should not be in the book. But it was so closely identified with the area!

V. Adams: And was so beautiful.

Adams: It is the greatest building of its kind in America. It's just an incredible thing. And we put that in, called the Ranchos church, and Mary Austin thought it was all right to do it. But we had the old church ruins, the new church, and then the Ranchos church. And seeing that these were the intrusions of the Catholics, it didn't make much difference; but strictly, it's not Taos Pueblo.

V. Adams: Well, they're old and new--

- Adams: I made a picture of a kiva in a dust storm. The camera was shaking in the gale. I really got into Taos; to do it today, you'd do it totally differently.
- V. Adams: You couldn't do it today, Ansel. Because it's different. I mean, there were still the people there who really felt for it. Now, you're just a tourist and you pay your money and you get to take some pictures--
- Adams: Yes, but I still think if you went there, and wanted to do a definitive book--not on a tourist basis--that you could do it. You'd have to pay for it, which you should.
- Teiser: Did you then?
- Adams: I gave them a book. I think I paid a hundred dollars too.
- V. Adams: Mary Austin said they wrapped the book in deerskin and put it in their archives.
- Adams: It's in the kiva.
- Teiser: Oh, it is!
- V. Adams: It's very precious.
- Teiser: Did they help you? Were they interested in what you were doing?
- Adams: Oh yes. They were very good. The word went out to help. And I didn't have any trouble at all, except one time a big fat Indian jumps on the running board of the car: "Pay me one dollar." And I said no, it was already paid for. We paid a hundred dollars for the right to do the book. He said, "Pay me one dollar." And I speeded up the car and he almost fell off, and I felt bad about it.
- I told Tony [Luhan] about it. "Oh, he damn fool. Pay no attention." [Laughter]
- Teiser: Was Tony Luhan a Taos Indian?
- Adams: Full-blooded Taos Indian, yes. Slightly ostracized--
- V. Adams: Well, he'd sloughed off his wife--
- Adams: Of course, Mabel did a lot for the Taos Indians.
- V. Adams: One time I went with Tony to the Indian school, and he talked to some little boys who must have been his children. He said, "They're my nephews."

- Teiser: The picture of Tony in the Taos book was done in San Francisco?
- Adams: The picture of Tony was done in my studio in San Francisco.
- V. Adams: It was so thrilling. He would take just a little drum that we had and he would sit in the yard and sing, and all the neighborhood kids would come around. Oh, it was such fun. He was sweet.
- Adams: It was really an experience.
- Teiser: There's such a big literature on all this, and often Tony Luhan is made fun of.
- Adams: Well, the point is that an awful lot of sophisticates try to get on this bandwagon, and they really don't know anything about it, you see. Hearsay, and second hearsay, and all kinds of very strange misinterpretations. But I think he was much more naive than anybody could imagine. But Mabel was a hunter, and she hunted all the prominent people to bring there; she literally captured them!
- V. Adams: She took us up to that cave, I don't know where it was.
- Adams: Wasn't it near the Blue Lakes?
- V. Adams: No. Arroyo something--I don't know. We went up the valley, as if we were going to Colorado, and then we went up a canyon.
- Adams: Oh yes, I know.
- V. Adams: And it was something that was supposed to be very serious, and the light came down at a certain angle at a certain time. And she said maybe the Aztecs had been there. I mean, it was very super-super. And some girl she'd taken there just felt that she saw them all there, and she crawled out of the cave--
- Adams: She was slightly fey.
- V. Adams: She had a feel for all those things. [Laughter]
- [End Tape 7, Side 2]
- [Begin Tape 8, Side 1]
- Adams: Well, I think an analysis of this whole Mabel Luhan business would be exciting, because she, of course, had, as I said, a tremendous amount of money and influence.
- V. Adams: You've read some of her books, haven't you?

Teiser: Yes.

Adams: She had a salon in Italy, and she was always gathering people unto her. And the biggest feather in her cap--it was quite a struggle--was to get Lawrence to New Mexico. Now, as far as I can make out, from reading the things and knowing her, that poor old Lawrence was dragged there by his beard, and was very unhappy, because he became sort of a curiosity. She could afford anything, and she just kept these people; she would collect these celebrities.

V. Adams: She probably fought with Frieda, didn't she?

Adams: She fought with everybody, in the end. We got along all right; but she was mad at me one time--furious.

Teiser: Why?

Adams: I don't know; I guess I wasn't sympathetic enough. If you ever raised your voice in the slightest bit of criticism, you were out. But I never really got out, I just got put in the dog house.

V. Adams: You didn't fall for her, Ansel; you know, that's one of the things.

Adams: You see, I didn't have any concept at all of being a celebrity, of being important to anything.

V. Adams: Well, you were just a young man--

Adams: I was just trying to do photographs. Of course, now you have this feeling--people tell you you're celebrated or well known, and so on. It didn't make any impression on me because this is the kind of thing that only historians can define, and I know I've made certain contributions, but certainly at that time I was a nonentity and was coming on the coattails (if you'll pardon the metaphor) of Mary Austin and a few others.

But Frank Applegate and she had a falling out--

V. Adams: Mabel?

Adams: Yes. They had a falling out.

V. Adams: Well, she'd had a falling out with anybody who wasn't under her thumb, I think.

Adams: I think she was hypersexed--

V. Adams: And you and Frank Applegate didn't fall for it.

Adams: No, thank God! I must hasten to say that my hyper was very different from her hyper. [Loud laughter] Hypo too!

Adams: Well, anyway, the whole New Mexican picture, of course, is very mixed. I think we got through a lot of it.

V. Adams: Well, we did go out to Taos. We did stay at Mabel's, and Ella Young stayed at Mabel's.

Paul Strand and a New Approach

Adams: And that's where I met Paul Strand and saw his negatives, which changed my whole direction in photography. This was after I had done the Taos book pictures. Then I saw Paul Strand's negatives, and the approach was something so tremendous to me that I literally changed my approach. And I can say that when I came back to California the seed of the Group f/64 movement was sown.

While other people had been working with the "straight" idea, I don't think other people had ever stretched it as much. We made it a bit of a cult, in a sense--that isn't the right word--what would you say?

V. Adams: I don't know, but you all got together and said, "Now this is the way we feel photography should be," and they talked about how to do it, and what kind of a name to give the approach.

Adams: I'm trying to get the bridge between my experience with Strand and my change of style. My change was very definite after that. I think I was--with the exception of Weston--the first one to make the change, and then many others followed.

I'll never forget one photographer (I can't remember his name), when I did my Golden Gate picture before the bridge--1933, I guess*, and Albert had it published--a little printed thing to give all his friends; he called it a keepsake. This man was perfectly furious, because he said, "This isn't the Golden Gate." And it was nothing but jealousy, probably because he'd tried to take it, but I was lucky and had a good day and beautiful clouds. We've never been able to find out what he meant by saying, "This isn't the Golden Gate." Was it because it wasn't his concept, or was he peeved over the clouds?

V. Adams: Did he want to see it looking the other way?

*It is titled "Golden Gate, 1932" in The Eloquent Light.

Adams: No, because the Golden Gate is as you come in--it's the gate to the harbor, not the gate to the ocean. So for quite a time there was a little conjecture on this statement, "This isn't the Golden Gate." And it was a very cryptic statement. It probably was that the Golden Gate was really mostly fogbound, and that we had a glorious pile-up of cumulus clouds, which is unusual, and it was a damned good photograph, and he hadn't made any one as good as that, so he was probably jealous. And I never have seen a photograph that carried quite those qualities, and I think that's entirely a matter of luck, because I lived near there and I saw these clouds, and so on!

V. Adams: How big a picture could you make of that now?

Adams: Oh, I have 30 by 40--40 by 60 inch enlargements. It's a little soft. I used an old Kodak film, but I made the best prints I've ever made of it just the other day.

V. Adams: Just looking at all these big things today--and the ones that were good and the ones that weren't good enough--is quite an experience.

Adams: That's it. Yes. Now, I don't know why that isn't the Golden Gate.

V. Adams: I don't know why it isn't either.

Adams: Except that probably the man didn't like clouds.

V. Adams: Well, Ansel, did you use any of that in the American Trust book? [The Pageant of History in Northern California]

Adams: No, I don't think that's in it.

V. Adams: He did a lot of pictures for the new Bank of California.

Teiser: When?

Adams: Within the past decade. I have three rooms in the new building [the headquarters building in San Francisco]: the Washington room, the Oregon room, and the California room. You go and ask, "Can they be seen today?" It would be a very good idea to see it; it might be interesting to see how pictures are used in decor in a room. They're all stainless steel frames.

For the book I did for Wells Fargo Bank--that was the American Trust Company then--we wanted "The Triumph of Enterprise" as its title. And the one powerful man on the board of directors was the stupidest man I've ever seen. He said, "I don't want any of that crap. That's one of those goddamned phony titles. I want to call it a 'Pageant of History in Northern California'." I had to give in to it. But imagine: "Triumph of Enterprise" tells the whole story so beautifully.

V. Adams: Beautifully.

Adams: Maybe I should suggest they do a new book called "The Triumph of Enterprise." But it was the triumph of enterprise. It's California that was nothing at first, begins in gold, but that's only part of the development. In fact, there was a very interesting discussion in Yosemite that most of the gold was taken out of California by the Spaniards long before they left.

V. Adams: Not most, but lots.

Adams: Well, there was all the surface gold. Much more gold than we ever got out of it in our mining. They cleaned out stream after stream. This is something which somebody's got to do a lot of research in. And it was a hundred and something years before the Anglos came over. But the gold was lying right there in the stream and was perfectly obvious. And they left some until Sutter's man [James Marshall] found it.

V. Adams: In Southern California they certainly were mining earlier.

Adams: They apparently were all over the place.

V. Adams: That is a thing I would need to have more documentation on.

Adams: Well, it is a very important thing. And historians shy clear because there isn't more documentation.

Santa Fe People, Continued

V. Adams: Ansel, one of the times when you were at Taos, Becky [Mrs. Paul] Strand and Georgia O'Keeffe lived in one of Mabel's houses across a meadowland. And then later on you went up there, maybe to take that one picture that you wanted to do afterwards, and for some reason or other, Mabel was upset--

Adams: Said she had no room for me. And Becky Strand stood up for me and said, "Mabel, that big studio is entirely vacant, and you put Adams up in that studio." (Everybody in Stieglitz's group called everybody by his last name.) "Or else!" And by gosh, I was over there in a cot in this enormous studio.

V. Adams: But Mabel was just mad at the time, and she didn't want anything to do with Ansel.

Adams: Very mercurial. But she was very nice the last time I saw her before she died, and so I have--

- V. Adams: They came down here to Carmel a number of times. And I guess one of her last times was to get Robinson Jeffers and his family to come to Taos.
- Adams: Oh, that was a tragedy, because she got him and started putting Robin on the make, and Una attempted suicide in the bathtub--cut her wrists, but it was a failure. It was that kind of an intense situation. If you didn't have a clinical approach to life...
- V. Adams: Well now, what more about New Mexico, while you're thinking about it?
- Teiser: To conclude the story about Robinson Jeffers, he went?
- Adams: Yes. And wrote some poems.
- V. Adams: He went down to Taos, yes. And his wife was so upset about it that, of course, it ruined everybody's point of view.
- Adams: Yes, that was really terrible.
- V. Adams: After that, I guess, they went to Ireland once or twice, and they had a happy time there. Mabel, for once, didn't really win.
- Adams: Mabel was after Robin, and that was it. And Una wasn't going to take it. I don't know what his attitude was. I suppose he--she was a bedazzling person. I mean, you had this opulence and style--
- V. Adams: I don't think opulence would affect him, but she was an intelligent person.
- Adams: Well, it was intellectual opulence. And Una was a very quiet person--very intelligent and nice--but there was a very great difference from the quiet of the Tor House in Carmel to this super spectacular landscape and house at Taos.
- V. Adams: Probably Jeffers just hid behind his pipe and didn't say much of anything.
- Adams: Well, you don't know.
- V. Adams: We don't know. We weren't around at that time.
- Teiser: What sort of a woman was Mary Austin? Was she a commanding person too?
- Adams: She was a commando! [Laughter] She thought she was the most beautiful woman alive.
- V. Adams: Well, not beautiful physically--

Adams: Oh yes, the most beautiful and appealing woman.

V. Adams: Noble.

Teiser: Well, in your picture reproduced in The Eloquent Light she's certainly--

V. Adams: Well, that's the most becoming picture I've ever seen of her.

Adams: She was very intense. Extremely intelligent. Extremely opinionated, and thought that all men were just going to fall right at her feet.

I think I can tell this story about Orage at a party at Bynner's, with Mary Austin. This is really very funny. Orage, of course, was a provocative person. He was a disciple of Gurdjieff.

Teiser: I didn't realize he was in the West.

Adams: Oh yes. We were very good friends, and I have an excellent picture of him.

Well anyhow, they were at Bynner's and Orage was giving a little seminar discussion in which he said he figures that the value of literary work is entirely what you were paid for it--he was that kind of a person. He'd say these provocative things, you see.

V. Adams: Always stimulating conversation with him!

Adams: So Mary Austin said, "I dispute this." He said, "Well, Miss Austin, history seems to bear this out." She said, "I dispute that." He said, "Well, Miss Austin, that's what I believe." She said, "Mr. Orage, do you mean to say that if I sell a production novel, or a story for the Ladies' Home Journal, for five thousand dollars that that's more important than my books on the Southwest, my creative series, my creative work?" He said, "Yes. If you sold it for five thousand dollars, I would say it was more important." She said, "Why, Mr. Orage, I would rather prostitute my body than do that." He said, "Don't worry, Miss Austin, you couldn't." [Laughter] Dead silence! One of the greatest stories I've ever heard, and I was right there when it happened. Oh, that's the kind of thing that went on down there all the time, and Bynner was just about blowing a cork. He was very, very kind, very intelligent, a very considerate man, and he couldn't laugh. I could just see him sort of holding back. That was really a great story.

Teiser: Was working with her difficult?

Adams: I never had any trouble with Mary. She wrote an iron-bound contract on the book with the idea that among friends a contract should be severe and nothing left to argument. Can you remember one episode that wasn't pleasant?

V. Adams: No.

Adams: She was mad at you once, because you didn't have lunch ready for the working man--that's right.

V. Adams: I don't remember that.

Adams: A man was working in the garden, and you said you'd have lunch, and it was twelve o'clock and it wasn't quite ready, and she said, "Oh, the working man has to have his lunch right on time." But she liked you much better than most people.

V. Adams: I don't even remember that.

Well, I remember the trouble I had trying to get things ready for the working men [in Yosemite] when I was eighteen, but this was after I had gotten married. I just don't remember.

Adams: That's the only thing. Let's see--she was mad at me for something else. Oh, I wrote a letter to the Yale Press saying that it was all right with me to do something extra to the text of The Land of Little Rain, but you'd have to check with Mary Austin. And her letter to me was, "You have no idea of the terrible thing you have done. You should have checked with me first before you wrote the Yale Press."

V. Adams: She stood on her rights.

Adams: That was perfectly ridiculous, but that was the end of that. I mean, we were all very good friends.

V. Adams: She was awfully nice to us; she was really.

Taos Pueblo, Continued, and The Land of Little Rain

Teiser: For the Taos book, did you show her the photographs and she followed them with the text? How did it work?

Adams: No, no. She did the text and left me alone. The text doesn't relate to the photographs. It's an essay on Taos. It's very good. I think we really should reprint that.

V. Adams: I think so.

Adams: I think Morgan & Morgan could do that.

V. Adams: Well, Jim Holliday was very interested in having the Book Club do it.

Adams: No money in the Book Club, dear. I still think the artist deserves payment.

V. Adams: Well--

Adams: There are lots of things that you'll never get paid for anywhere else that you could let the Book Club do, and of course, the Book Club does beautiful things.

V. Adams: They do a beautiful job.

Adams: But when it comes to a person who's still a professional--

V. Adams: I still would like to see a thing like that done by the Book Club.

Adams: Well, it would never get out to the people. It just gets to a small, tight membership, which keeps it.

V. Adams: Well, that's true. But it would be kind of nice.

Adams: I think there's thousands of things done in the twenties, thirties, and forties at the Grabhorn Press--like Mark Twain's letter to his lawyer and laundress, you know--completely inconsequential things. And done up by such as John Henry Nash in expensive style.

V. Adams: We don't have very many Nash things, you know.

Adams: No. I thought he was terrible; a fake. Grabhorn was one of the greatest printers that ever lived. But if you were very wealthy, you could say, "Well, sure, we'll let the Book Club do it, and give it as a keepsake." But I'd like to see that Taos book done as a facsimile by the Morgans, and I bet they'd sell twenty-five thousand copies. And the people would see it, and I'd make some money. I'm getting along. I have to begin to make some money and salt it away, so I can--afford the papers that have my reviews in them. [Laughter]

I have plenty of things that we could do. I have early pictures of the Sierra Club, camp pictures, and groups of the early people, and little episodes--ideal Book Club stuff. I mean, if I was just to give my reminiscences of John Henry Nash--well here's the thing: the Taos book [Taos Pueblo]. Bender had gotten John Henry Nash to agree to do it. Bender said, "I'll subsidize it." I went over to see

Adams: Nash and he said, "Well, I've got the end-papers for it," which were a great big stack of Spanish parchment--you know, Gregorian chant music sheets!

"But," I said, "Mr. Nash, Taos is Indian, not Spanish."

"Pueblo, pueblo--that's Spanish." [Laughter]

So I went back to Albert and I said, "This is hopeless. This guy doesn't know what he's talking about. We can't have a Gregorian chant as the end-paper." He said, "Well, I guess we'd better talk to old Grab."

Then there was a very interesting episode there, because [Edwin] Grabhorn did not print that big a spread as a unit. He printed them this side and that side, and for some reason they weren't lined up. And so when Hazel Dreis begins to bind it, she finds that the pages are misaligned; they will not be parallel in the binding, you see.

V. Adams: Does that show? Or was she able to correct it?

Adams: Oh, you couldn't do it. Grabhorn said, "Why, this is absolutely crazy. It is absolutely accurate." She laid them out, and he'd made them a quarter of an inch off. Well, this wouldn't do Grabhorn any good. We just had enough paper left to print it. And he sent it to another and larger press [William Eveleth's] and sat over its production.

But even the greatest people, you know, can make terrible faux pas. And he had never printed anything bigger than what the press would take. So he thought that if he fed this in, then reversed it--not a really work and turn system, but a reversal. And it wasn't aligned. So you have to imagine that as the pages became misaligned the misalignment would accumulate in the binding!

And poor Hazel! I remember the perspiration on her forehead. She said, "I can't bind it. There's no way to bind it. They don't pull. I'd have to cut every sheet, and put them in and correct them, and that would cut down the sheet size." And she was absolutely right.

Teiser: Was the book itself a great success?

Adams: Oh yes. Sold out, and it's worth a fortune now. I don't know what it's worth. You'd get a thousand, two thousand, anything you want. One of the rarest books there is.

Harroun: It's a beautiful book.

Adams: It sold for seventy-five dollars, I think.

Teiser: But then, on top of that great success, you turned your back on that type of photography?

Adams: On that type of pictorial image. I didn't exactly turn my back on it, but I changed. Now the difficulty is--and this is a very important thing--I can't make what I call satisfactory prints from most of those negatives, because they were made for another process. That was empirical in approach. I didn't know what I was really doing in those days. It was all by trial and error. And I can print the "Woman Winnowing Grain," and the "Ranchos de Taos Church" and maybe one or two others--like the New Church--I can print those well now. The others I just can't print on the modern papers. They're not sharp enough; they're not decisive. That's why just printing the Taos book again wouldn't work. But if you made facsimile pictures--took them to an engraver to make a facsimile plate--and did it as a reprint, in a smaller format--it could be very nice, I think. It's in the public domain now, so anybody can do it.

Teiser: You didn't copyright it?

Adams: It's copyrighted, but the copyright only runs twenty-eight years.

Teiser: And you can't renew it now?

Adams: No, no. In fact The Land of Little Rain is in the public domain, and John Muir's writing. You could do a book of The Land of Little Rain. You could do it by etchings or drawings or photographs--anything you want.

Teiser: That was published in 1950. How did you happen to decide to do it?

Adams: Well, this meant so much to Mary Austin. I loved the country and I had so many pictures of it. I'd like to do that book again; most of those pictures could be much better reproduced. Because I think that's quite an impressive book. There are lots of things I could add to it.

Teiser: Were many of the photographs taken before, or were they done for this purpose?

Adams: Well, they couldn't be done after the book was published! They all had to be done before. But for ten years we thought about it. As I say, the text was public--after her death. And the heirs have no right to it. In fact, if there were any heirs you should ethically advise them you were going to do it, but there aren't any. That's an ethical point. Say that Ella Young had done a book of poems, and I wanted to take the poems and make photographs for them, I wouldn't have to pay anybody anything. But still, you would

Adams: feel, ethically, that perhaps her heirs would have some rights, so you'd make a token payment. You'd put something in there for them. But you can't do it in royalty. That's a personal decision. It does not have to be done.

Teiser: The work on The Land of Little Rain, then, was done over a period of years--your photographs?

Adams: Oh yes. Many photographs over a long time. And I've done things since then of the same areas.

More Southwest Friends and Experiences

Teiser: You met John Marin in 1929, according to Mrs. Newhall.

Adams: That's right. At Mabel's.

Teiser: Had you known his work before?

Adams: Oh, very slightly. He was a funny little man. He was very shy, mouse-like. And I met him first in a bare room; he was laying out paintings, and they were absolutely beautiful. It was obvious he didn't want to talk. And then you've read Nancy's thing about the piano [in The Eloquent Light]. Well, after that we got along fine. But I know that Marin would go out and would sit around for two or three weeks never doing anything, just looking around at the country and then suddenly distilling it, and in one morning doing ten, fifteen, or more watercolors--using brush, fingers, thumb, everything--just pouring these things out. I think he's one of the greatest artists we've ever had.

[Interruption--discussion of details of coming exhibit at Metropolitan Museum]

Adams: Let me see, there are some things in New Mexico--Well, much later I did a series of pictures for the Boy Scout Camp at Cimarrón. That was left by a very wealthy man, who was a parody of rightist virtue. But it was a very moving thing, and a very distressing thing, in a way, to see busloads come in from all over the country, disgorging these kids who'd never been anywhere with any mountains. Cimarrón's is a low place in the Sangre de Cristos, east of the mountains.

They would set up their pup tents, and they'd have to go through all the Boy Scout rituals. And then they'd be taken out on trips. Unfortunately it's a rather uninteresting area--it's rather arid. There's only one peak that looks like a peak. The

Adams: rest of it's great Colorado-type slopes. I stayed there for three weeks. I liked the story, but it was awfully difficult, because the environment was so dry and barren.

Get a bunch of kids from Alabama and Rhode Island and dump them out in the wilderness and see what happens. It rains, thunders--oh, it was terrifically stormy, you know; the worst hail storm I've ever seen was in Cimarrón. I have one gorgeous photograph of a thunderstorm and clearing clouds, and the wind was so strong that I had to hold the eight by ten camera down. The photograph isn't sharp for that reason, because it's vibrating. But we had hailstones right at the Kit Carson museum as big as golf balls. And this terrible roar begins, and I'm in this place, and I knew the car was closed up, and I said, "Well, here goes the old Cadillac!" That radiator hood will go right to the moon. Everything bounced off the car; there wasn't a single dent, but it killed crops. It did a lot of crop damage. When you see hailstones that big, you get a bit concerned.

Teiser: Were you photographing the kids too?

Adams: The kids, the camp, and the landscape.

Teiser: What was the end result of that?

Adams: It came out in the Boy Scout magazine--big article. Strictly a professional job, and a very difficult subject to photograph.

In the early days, Frank Applegate and I would tour all around. We went south of Albuquerque and way up into the Chama Valley, and visited lots of places. And with my ferocious lack of documentation ability, I just don't have any real record of it. Saw a major part of northern New Mexico, and many moradas that no longer exist.

The roads were unbelievable. At that time, the major population of the villages north of Santa Fe was Spanish-American; there was little English spoken. And the Spanish is a very interesting Spanish, I've been told. It's a bastardized conquistadore Spanish of four hundred years ago. They've had scholars from all over come and try to study this particular Spanish dialect that's used. And there were people at Chimayó that had been to Española, twenty miles away, but had never been to Santa Fe, thirty or forty miles away, in their whole lives.

I visited the Los Alamos school when it was a school, and it was just like a camp in the high mountains with log cabins--big log cabin buildings. I can't remember the design. But it was a very remote place--a rather special place for kids. This was called the Los Alamos Ranch School, I think that was the name.

Teiser: The Los Alamos School--was that originally an Indian school?

Adams: No, it was a boy's school.

Teiser: Private boys' school?

Adams: When the Manhattan Project came into being, they bought this whole thing out; of course, during the War I think the school had closed down. Well, what they did was to draw employees from all over the area, and the brighter young people from these villages would go up there and work. And that disrupted the village life--everywhere. It created a different economic picture.

And now the villages are in, I would say, a rather horrible state. Lots of delinquency, vandalism, nothing really going on, nothing made, you know. Chimayó is the top place. They have Chimayó blankets and the Santuario.

It's important to say that it's Spanish-American and not Mexican, you see.

V. Adams: They have Anglos and Spanish-Americans in the Southwest.

Adams: And for many, many years--it still is, I think--the government documents in the legislature were bilingual. But as I say, there were many times when Applegate and I would go out to the remote places and there wasn't one person around with whom we could talk English. There are a few of the older people remaining.

V. Adams: Santuario was, I thought, emotionally very nice when we went this time.

Adams: Yes, it was good.

V. Adams: There were people who went in with their little children into that inner sanctuary.

Teiser: Where is that?

V. Adams: Santuario is a place north of Santa Fe.

Adams: It's called the Santuario de Chimayó. Chimayó is a town.

V. Adams: But the chapel has an inner place, a little deep hole with mud that they feel is healing.

Adams: The hole didn't seem much bigger forty years ago--I don't know what they do. [Laughs]

- V. Adams: But here are these people--these Spanish-Americans--coming there from all over the Southwest and taking their children in; they all brought back little bits of mud. They'd have a paper bag or something, I noticed, when they went out, to take the mud home in.
- Adams: I remember, the last time I was there, I happened to come on a very old Spanish-American lady, and she hobbled in and then she touched all of these things on the railing, and altar, and gave her Hail Marys in Spanish. And boy, she had a lot of stamina! She went through that whole building and out the back. That was her last visit--this was the feeling of finality. She came from a hundred miles south.
- V. Adams: Saying goodbye to all these things known in her youth.
- Adams: Yes. Most of these people were very provincial, and as I said, many of those people in Chimayó had never been as far away as Santa Fe.
- V. Adams: Of course, but that changed after they had the buses to go over to Los Alamos.
- Adams: Then, of course, the whole thing blew up and changed. But there's still Trampas--
- V. Adams: They still have faith in these places, and that's what was very exciting to us. Beaumont [Newhall] said, too, it was very touching to him.
- Teiser: Has it changed greatly physically--the country and the buildings?
- V. Adams: Fewer old wrecks and more tin roofs.
- Adams: Very little; I was amazed. I think it's still quite a remarkable place.
- V. Adams: It's beautiful country.
- Adams: Canyon Road and Camino del Monte Sol are still pretty much like they were forty years ago.
- V. Adams: It's like here in Carmel. We want to keep the artichoke fields. In Santa Fe they want to keep the old things. They do pretty well.
- Adams: Albuquerque is a mess, in a way.
- V. Adams: Well, that's a big city now.
- Adams: But where my friends the Newhalls live--La Luz--it's stunning; a fine architectural development.

V. Adams: Modern adaptation of Pueblo style.

Adams: Oh, it's beautiful design--like nothing I know of, actually. You can go up to Santa Fe in less than an hour. Parts of Santa Fe are commercial, but still there are these old beautiful things to be found.

Teiser: The quality of the light there--is it special still, or was it ever?

Adams: All of this "quality of light" business is an illusion in a sense. Santa Fe is at seven thousand feet. So you have a different intensity--relationship between sunlight and shadow--because the sky is a deeper blue, because it's that high elevation. And the reflection of the ground is different. It's a little lighter than in most areas in the country, I think. Now apparently the quality of the light in Greece is due to the fact that there's water vapor in the air and there's a fairly soft light, and there's a lot of white. So you get reflections and general illuminations. It's a very intangible thing.

San Francisco has a special light too. When we test Polaroid film, we get totally different results than we do in Cambridge.

Teiser: Even though all measurements are the same?

Adams: The measurements are not the same, that's it. If you design a film for a camera for somebody to make a snapshot, and you design it for Cambridge and Boston, for many days of the year you're going to have a different quality than if you design it for San Francisco or Santa Fe.

Teiser: What do you do then?

Adams: Well, this is one of the great problems. I mean, you get more contrast. Out here, we always have--of course, today's a fog day--I mean this is a gray day, but this is a purer gray than you get in Boston or Cambridge, because there would be smog mixed with it there. You'd get a little yellower light there. This is very neutral light now. So, it's a matter--well, if you want to be technical about it, it's a matter of Kelvin degrees color temperature. As you go into higher altitudes, you get a higher and higher Kelvin. The sun is a little brighter, the sky is a little bluer, and the shadows, of course, are much bluer, because they reflect from the deeper blue sky.

Then you get to a water vapor atmosphere, like the tropics or Florida or the east coast, and you have a lower Kelvin, and you have a little warmer shadows--a softer luminance range. There's nothing mystic about it.

Adams: But Santa Fe gives you the feeling of being on top of the world. It's at seven thousand feet, like Mexico City. Albuquerque's five thousand feet. So there is a fundamental difference. There's less atmosphere--I think one-third less--for the sunlight to go through. You're getting about one-third the oxygen, maybe a little less.

That's why some people have trouble. The ballet came, you know, to Santa Fe for a performance. The previous performance they gave was, I think, in Dallas, and then they were flown to Albuquerque and came up to Santa Fe and, without acclimatization, gave their performance. They just collapsed, were actually falling down on stage. Here they were going to the extreme of physical effort which was all right under normal conditions, but at seven thousand feet they couldn't do it.

And Stravinsky, when I saw him and heard him conduct his Persephone at Santa Fe, was really exhausted. But they warned him; he'd been there about a week trying to get acclimated.

I get acclimated very quickly. I've been so used to altitudes. You know, twelve thousand, ten, Yosemite, sea level, back and forth. It took me a little longer this time in Albuquerque--a couple of days. I can "pick up" very quickly. But a lot of people have an awful time at high altitudes.

Teiser: Is there smog there now that you didn't see before?

Adams: Yes, there is. There's natural smog in Albuquerque, because that's a rather big city. But the worst thing comes from the Four Corners power plant. They're coal stripping. They've got one plant; they're going to have five. And the one already puts pollution out which is seen in the Rio Grande Valley all the way to Albuquerque. And Durango, and the Colorado--

V. Adams: That's why they fight strip mining.

Adams: It's a terrible thing. In fact--well, it's not that strip mining isn't bad enough, but it's the fact that they've absolutely spent no money in smog control. They say they have, but when you see the smog coming down, for the first time, to Taos, Santa Fe, and Albuquerque, you know that there's trouble. There are going to be five plants. It will be the largest single power producing area, but I don't know what they're going to do when they run out of coal. They've drilled deep and gotten the beautiful spring water, which is the clearest water in the country, which it is assumed feeds the Hopi Springs, and they're using that to sluice the coal.

So the whole Southwest may be degenerating to a point where it really will be lost to us forever.

V. Adams: Better enjoy it while you can.

Adams: Yes. An unhappy desert. It's very serious. But that's because there's so many people. But who wants genocide? I'd rather have management.

V. Adams: Well, can you think of anything else for Santa Fe? Did you tell them the story of when you got tight, and what Mary Austin said?

Adams: Oh yes. There was a big party at Witter Bynner's one night, and I drove Mary Austin over. And then I got to saying, because I had some consciousness left, "Well, who's going to get Mary Austin home? I can't drive." I was very concerned that somebody get Mary Austin home.

The next morning I said, "Well, Mary, I guess I lost my reputation last night." And she said, "You certainly did. But you lost it so quickly that nobody missed it." [Laughter]

Teiser: I think I read in Mrs. Newhall's book that Ella Young was encouraging you to continue writing poetry.

V. Adams: Which he did.

Adams: Oh yes, she did. Because I wrote very romantic poetry, and then suddenly burst out into very avant-garde poetry, and then quit. But I studied a great deal of literature and I was pretty good on the sonnet.

Teiser: You write good prose too.

Adams: Well, I never should be known as a poet.

Teiser: Did Ella Young succeed in encouraging you? Did you write more poetry as a result of her encouragement?

Adams: No. She said I looked like Yeats, and she thought I could write like Yeats--not to look like him, but write at a certain level. But that was not something which was accepted. Well, if I didn't have music and photography, who knows? I might have done a cookbook. [Laughter]

I remember one time coming back from a party at Witter Bynner's very late, and it was quite a party. In the morning I go out and I find a flat tire, and I open the trunk of the little Marmon we had, and here is one of Bynner's guests all curled up fast asleep. Of course, somebody'd put him in there when he was very tight, and why he didn't suffocate I don't know. It was a horrifying experience to see this body in this trunk! [Laughter] I pulled him out, and he was breathing, and he said, "Where am I?" I said, "Well--"

V. Adams: Horrible!

Adams: Yes. That was really quite a story.

Teiser: Maynard Dixon spent some time in the Southwest. That was not at the same time?

V. Adams: He was in Tucson. I don't know that he was in Santa Fe, particularly.

Adams: Tucson is another story.

Teiser: When were you there?

V. Adams: We visited Maynard and Edie.

Adams: Maynard and Edie [Edith Hamlin] Dixon.

Teiser: That was later.

Adams: I did some work for Kodak in Phoenix, and then went to Tucson for the Guggenheim project to do the Saguaro National Monument, you know--the cactus forest. And then our very dear friends Maynard and Edie Dixon were there.

Now Edie is one who can tell you a lot--Mrs. Maynard Dixon. Edith Hamlin now. And she could tell you a lot about me because we're old, old friends.

Oh boy. Can't think of anything else.

Harroun: Did you know Georgia O'Keeffe before? Or did you meet her down there?

Adams: I met her down there. And then of course we got to know her really well in New York after 1933.

V. Adams: Stieglitz, you know, gave Ansel an exhibit in his rooms [An American Place] there. He'd practically given up doing anything with anybody new. But that would be a long story.

Adams: The New York story's another story entirely.

[End Tape 8, Side 1]

[Interview VII -- 27 May 1972]

[Begin Tape 8, Side 2]

Teiser: We were speaking of the Santa Fe period. You mentioned several times A.R. Orage, who seems to have been a most fascinating person, and I know very little about him.

- Adams: Well, I didn't know too much about him. I met him in San Francisco. He had been in New Mexico. He was a disciple of Gurdjieff.
- Teiser: I didn't even realize he'd been in America very much. Did he live here in the later years of his life?
- Adams: For awhile he was here, yes. I really can't tell you any more than that. Some mystically-minded people are very much surprised. They say, "You know Orage!" Orage was a guru, I guess, to many people.
- Teiser: Yes.
- Adams: He was also a provocative discussionist, if you want to use the term.
- Teiser: What did he look like?
- Adams: He looked like a British orchestra conductor. [Laughs] He was smooth shaven. I can't exactly remember just what he did look like. He was rather intense. He had a very literary air about him, but he also had a self-assured manner.
- Teiser: He was apparently rather well known for having edited a literary review in London.
- Adams: Yes.
- Teiser: Was he interested in photography, or all the arts?
- Adams: I guess just in general. I can't remember. I did a picture of him; not a very good one.
- Teiser: Did he live in San Francisco for a time, or did he just come and go?
- Adams: I think he visited--a month maybe; came to the University at Berkeley and Stanford, visiting and lecturing. It's hard to remember the details.
- Let's see, about Santa Fe, I've been back quite often, and last time, I had a good visit with Beaumont and Nancy Newhall, and appeared with Beaumont's group at the University, and then gave a talk at the Art Museum in Santa Fe; and of course I'm a great friend of Laura Gilpin's, the photographer.
- Teiser: Is she still photographing?
- Adams: Oh yes, she just got a grant to do a book on the Navajos in the Canyon de Chelly. She's eighty-three, and still gets around with a cane and a little arthritis. Perhaps you saw that wonderful

Adams: picture of both of us when we met at the museum--by a news photographer--giving each other a smack, and we were laughing. It came out on the front page of the Herald, the Albuquerque paper.

Teiser: Was the Taos book--the success of it--a factor in your decision to make photography your profession then?

Adams: I think it was. But of course I changed my style; but it did have success. And Stieglitz was very much impressed with it. It was one of these things that sort of proved quality. You see, one of my objectives is to maintain a very high image quality, both in the originals and in reproduction. So I have been quite influential in getting the reproduction of fine prints paid more attention to.

The Reproduction of Photographs

Adams: We did develop, I think, some of the finest reproductions in the world in San Francisco with the Walter [J.] Mann Company. Mr. [Raymond] Peterson was the engraver. And that was for the letterpress process.

Now you have several processes: intaglio and raised dot, and there's callotype and gravure. But the half-tone process means that the image is broken down into dots of so many per inch usually lined up at 90° but not necessarily. And in letterpress these dots stand up like little mushrooms; they are like type.

Teiser: Your interest in printing is a subject that we've got notes on. I came across an article by Francis Farquhar in Touring Tropics, February 1931, in which you had a lot of photographs--a whole section of photographs in sepia on brownish paper. Do you remember it?

Adams: Yes. That's probably rotogravure.

Teiser: Yes. The article was "Mountain Studies in the Sierra." In the introduction Mr. Farquhar said, "From the beginning of his professional career, he has closely associated photography with the other graphic arts, especially printing. In selecting the process for an individual picture, he keeps in mind not only the quality of the negative and the photographic print, but also the relationship of the picture to its ultimate surroundings. It is this comprehension of kindred arts that has made Ansel Adams so successful an illustrator."

You had then long had an interest in printing?

Adams: Oh yes. Through Albert Bender I knew many of the printers. I had tried various reproduction processes and made some study of it. At that time, the so-called offset was a very bad process of very poor quality. The letterpress was the finest. Of course, you could get gravure, but gravure is very tricky. It is an intaglio process. It was expensive and it wasn't really too accurate.

This is the American Earth and Cedric Wright's book, for instance, were done with that process, and it's really not too good.

Teiser: Was that sheet-fed gravure done by Charles Wood?

Adams: Yes. Well, no, Charles Wood was much better than that. This was the Photogravure and Color Corporation of New York. Charles Wood was very good, but I think he realized that there were problems, because the scale of gravure--certain tones had a tendency to "jump" around the middle values; they'd go higher or lower in tone. And the whites had a tendency to block.

Now, Stieglitz's gravures that appeared in Camera Work were hand-done, and each one was put through the press and watched and made like a fine print. It must have been a very costly process.

Teiser: I remember the Grabhorns used to use Meriden Gravure.

Adams: Yes. Well, that was one of the worst going for any continuous-tone image. They could use it for etching or a litho or woodblock, and they were really beautiful. But when it came to the continuous tone of the photograph, it was just awful. The reproduction looked like putty; it couldn't hold photographic values at all.

Teiser: You're speaking of Meriden?

Adams: Meriden. Grabhorn did a lot of reproductions that weren't from photographs. He really didn't like photographs.* Whenever he made a reproduction of a photograph it was terrible, because he always did it with some kind of a soft process on rag paper. A photograph needs a smooth surface. But the etching and the lithography, etc., Meriden would do beautifully!

*See interview with Edwin Grabhorn, Recollections of the Grabhorn Press, Regional Oral History Office, The Bancroft Library, University of California, 1968, pp. 59-60, and interview with Robert Grabhorn, Fine Printing and the Grabhorn Press, Regional Oral History Office, The Bancroft Library, University of California, 1968, pp. 54-58.

Adams: Then of course, as I say, the letterpress, the three-color letterpress, is the great Bruehl-Bruges process you see in the old Vanity Fair magazine--that was really four-color where the red plate is used as black plate as well and strengthens the image. If you look at a color picture with a microscope, you see that the colors rotate at certain angles. It looks like a mosaic. Those of course were of the raised dot. But you get down to a minimum dot size, beyond which it's just collapsible and it won't stand up in the press. I think people don't realize that all the dots have the same density of value. It's only the area of the dots in relation to the white space that gives the fractional tones.

Teiser: What's the highest screen you have used?

Adams: Well, the one that gave us the best results of all was the 133-line screen. Now that didn't give as much definition, if you look very closely. It's only 1/133 of an inch; one hundred thirty-three lines to an inch. The deep tones wouldn't block up. And if you stop to think about what happens, if you have no dots you have pure white paper, then if you suddenly jump to a dot you get a "contour line." What is called "highlighting in the forehead"--as sometimes you see it--shows abruptly no tone to tone.

Then when you get into the two-plate offset, then you have a very much finer progression of values.

Teiser: It's two blacks?

Adams: It's two "blacks." And it's called duotone because at one time people used color in one of the plates, and an awful color could result. But if it's two plates--two blacks--one black ink may be slightly warm or cold in tone. And then they can make exposures of "long range" and "short range" and the two plates together will hold a greater range. And that's the system used now. The letterpress is practically a lost art.

Teiser: Walter Mann, whom we interviewed* and have known for many years, of course took great pride in having done work on your photographs.

Adams: Oh, he did a beautiful job on the plates.

Teiser: Everyone has said you had your own specifications. I imagine you are very careful, aren't you?

*See interview with Walter J. Mann, Photoengraving, 1910-1969, Regional Oral History Office, The Bancroft Library, University of California, 1974.

Adams: Well, I tried! There's two ways: you try to make the print which will fit the process, because the negative that the engraver makes has to be through a screen. He gets his negative in screen form. In other words, if you look at it in a magnifying glass you see the dots of varying size. And that gives a certain limitation in his exposure scale. It goes to a maximum of 1.4, 1.5 on the scale. My prints go up to 2.0+ on the log scale: more than a hundred to one arithmetically. If I want to make a print for an engraver, he tells me, "I want the print value to be 1.4 and I can handle it." He can intensify the blacks. He can increase the contrast. But if the print range goes beyond the range of his film, he cannot hold the textures in high and low values. The whites go bleak, block out, or the blacks block up, or both!

Teiser: When your prints were being reproduced by letterpress, did you always see the proofs?

Adams: Oh yes. I'd try to make the prints the way they'd want them. Then they'd pull a proof. The letterpress engravers had the advantage of being able to selectively "etch" the high values. And we would work for sort of gray-whites to get all the values therein, and then "etch" them; it raises them up to the optimum point.

Teiser: That was where Peterson came in?

Adams: Yes. He was wonderful in that; a very sensitive craftsman! .

There's a very amusing story when we were doing the Edward Weston book, My Camera on Point Lobos. Dody [Warren], Edward's assistant, was watching everything with a hawk eye. She went down to the plant one day, and there was this rather interesting picture-- it was just sand and rock. And she said, "Well, Mr. Peterson, I don't think you got this one! It's really flat. It's original sparkle is gone. I think we'll have to do that again." And he said, "Well, Dody, you're looking at the original print." [Laughter] He actually improved it. He made this image come to life. The original print was a little soft; Edward made it that way. She thought that was the engraving, and that didn't remind her of the print. But here was the reproduction, which was beautiful in tone. That's really one of the memorable moments!

Teiser: Well, do you make a different print for reproduction than you do for exhibit?

Adams: Oh yes. You have to. In fact, when the prints are in the solution they always look brighter and lighter than when they're dry. And papers don't all behave the same, so you have to learn how to use them. Then you have to say, "This is going to be reproduced and

Adams: I've got to keep it within the scale." That's why I have a reflection densitometer. I can check to see that I haven't overprinted. Underprinting I don't worry about too much. I'll show you something very interesting--[Walks away and voice trails off. Returns.] These are proofs of a monograph that Morgan & Morgan are doing.* These are good proofs. These are to be printed in New York. The one of the tombstone is fantastic. This portrait is a little too dark, see. Now we'll tell them they made that too dark. They have to make another plate. The face is too dark, the shirt is perfect. My print is all right in this case.

This one is one of the most extraordinary reproductions I've ever seen. They kept the pure white and all the details on blacks. But that was a soft print. This was a flat print which they expanded. And they did beautifully on these, except this one was a flat print, and they overdid the expansion!

Teiser: Is that the Golden Gate one you were speaking of yesterday?

Adams: Yes. This one before the bridge. But you see, this is good; this is excellent, beautiful. This is a beautiful thing.

But here's where I told the engraver to expand the contrasts, but he overdid it a little. They'll have to learn--so do I! I'll have to give them prints that are a little stronger. Psychologically, this is a warm tone, and here's a cold tone, and you see it's just terrible; loses all life, distance; but from the same plate!

We're not going to make it quite as brown as that. To show what I mean, this is just as clear, but it has no life. Now, for instance, just look at the aspens--

Teiser: My word!

Adams: So, the psychological effect of color, well that's the thing you have to know about. Talk to them. With engravers and most printers, it's the same general thing. It's a terrible thing, to have someone who doesn't know anything about quality come in and make remarks! If you can give them a constructive pattern, all may be well.

Teiser: Did you do that when Lawton Kennedy was printing your work?

Adams: Oh yes, we'd watch everything. Crocker was very good that way. They really printed very carefully, and they watched the press runs.

*De Cock, Liliane, ed. Ansel Adams. New York: Morgan & Morgan, 1972.

Adams: It would come off the press rather fast, and the printer was anxious to get it right. You see, in letterpress many things affect the result. The "makeready" has to be changed, and the ink may change. With offset, once it's set up, it goes through very fast; so you sit there, and they put a sheet in, and they run many sheets and then you study the inking, and once they've got it, there's nothing else you can do. And if that plate isn't what it ought to be, it's pulled off and made over.

Now, gravure is on a copper plate. And in the American Earth book, there were "four up," four pages on a side of a sheet. And if you changed one letter of that, it cost seven hundred dollars because you had to change the whole plate. But with letterpress, you'd just lift out the plate, or the line of type; the corrections were simple.

I had contact with Albert Bender and all the printers and the Roxburghe Club, and many reproducing processes. So from the very beginning that's been very important to me and my work.

Teiser: On the University of California book, Fiat Lux, wasn't that originally to be done by sheet-fed gravure by Charles R. Wood?

Adams: That was originally planned, and it was done by Wood, for Doubleday. You see, the University Press couldn't print it. It was planned to have 286 pages, but Reagan got in as governor and there was too much economy imposed, and everybody at the University was scared to print it, so they turned it over to a publisher. And in order to make it commercially feasible at the publishing level, they had to reduce it to 196 pages.

Teiser: But the printing was still done by Wood?

Adams: The printing was still done by Wood. I'm sure of it.

Teiser: And by gravure?

Adams: Yes, and some of it's very good.

[Guests enter; interruption. Returns with book.]

Adams: Colophon says it was printed by the Cardinal Company, under the supervision of Charles Wood. Designed by Nancy Newhall and Adrian Wilson. But here is a case of approximate quality. You see how granular that appears? That's really a very smooth photographic image. It is pretty good in the whites, but certain tones are not right--see those shadows. This variation in tone wasn't that extreme in the original. It "jumps" in stages.

Teiser: Does that do violence to your original?

- Adams: Yes, it does, very much. There's nothing much I can do about it. But something like this, just black and white, is just beautiful.
- Teiser: What is it that's in the University Archives--prints or--?
- Adams: Proofs. I have all the negatives. And they have a set of prints. They own the negatives, but I keep control of them, because they want prints all the time. I've got to turn them over to them some day. But as long as I'm around I'd like to make my own prints.
- Teiser: That's a wonderful book, I think.
- Adams: It could have been better, but it's not our fault. The University really tried.
- Teiser: I suppose books are often compromises unless you publish them yourself.
- Adams: Oh yes. Going up in price, terribly expensive, mechanical problems, paper problems, labor problems. We did so many things, went through so many trials. That's why I have a very skeptical point of view about the convention that things are better in Europe. They have good craftsmen, but they can go just as haywire as anybody if they're not under supervision. The best printing I've ever seen has been right in San Francisco. In Japan and Europe it's cheaper, except that you have to go there to supervise it, and you lose copyright privilege--there's all kinds of tangles in the thing.
- Teiser: Working with George Waters, as you do now, with duotone, do they do the same kind of correction of plates that the engraver can do?
- Adams: Well, they can't, no. That's two-plate litho. So he's got to do it in his negative. In other words, I've got to give him the right print. We can't monkey with the plate as much as the letterpress men did. It's very complicated. Waters is doing beautiful work.
- Teiser: Adrian Wilson said that they often do quite a lot of correction. He said once they took an automobile out of a picture--
- Adams: Oh, that's correction in the photograph. I have several photographs that are very badly damaged. I couldn't sell a print that showed marks and defects. Walter Mann Company has a very fine retoucher--an "airbrush" man. He can correct my print. He takes out these defects. You can't see them. You don't have any sense that there's any retouching at all. There's nothing worse than re-touching that shows.

[Interruption]

Adams: We correct defects and spots. And it would be perfectly possible to take out an automobile. You can do that. They have to commercially sometimes. But if I have a fine photograph, I'm not going to take out something important but I might take out a defect. Although, frankly, if I had a beautiful image and there was a beer can in it, I'd spot that out if it had no relevance to the picture.

And then there's all kinds of thousands of little things that happen in photographs when they are this small; they look like spots; then you take them out. When you enlarge the image, they may become part of the structure and should not be touched.

Viewing Photographs

Adams: There is the famous matter of Lincoln's mole. Lincoln had a mole on his face, and in little pictures, the mole looked like a spot. When they made a nice 11 by 14, it looked like a mole. Now the ethics are--you don't take the mole out as such; you take it out only if it is not readable--just a distraction. The eye picks up tiny little things all out of proportion to the size of the image.

Teiser: This brings up the viewing distance--and how things are supposed to be looked at.

Adams: Well, that's pretty complicated. The standard reading distance is fourteen or fifteen inches from the eye, and what is called the circle of confusion or the disk of confusion is the largest disk that appears as a point at that distance. When that's about 1/200 of an inch in diameter it's accepted as sharp. Some people say 1/100 of an inch, and it has something to do with the reading distance. But there comes a point when normal eyes cannot see a disk other than as a point. Then the image is "sharp." That's a very great simplification because that doesn't always hold. And there are several things that are always expressed as basic principles but for some reason or other are very flexible.

I'll never forget in San Francisco, I had a 16 by 20 print of a picture taken near Aspen. And it wasn't really sharp. It was all right in 8 by 10, but it did not look right in a 16 by 20. But a friend, Dr. Overhage, sitting at the far end of the room--almost as far as that lamp--looked at this picture and said, "Why doesn't that one seem sharp?"

Teiser: That's about how far?

Adams: Twenty or thirty feet. Now, there's no way to define a degree of sharpness--it mathematically approached the disk of confusion limit. Here, the illusion of sharpness brings in the term "acuteness." And scientifically that is the micro-density relationship--that is, the sharp difference of one tone to another. The curve appears as an abrupt "cliff" from black to white. Now with a picture that's out of focus or not sharp, there's no direct transition. You take the curve from black to white, that would be only 45° or more. Now you take a really sharp photograph and the curve is very abrupt. The eye in scanning it senses this thing. It doesn't necessarily see a disk and a point; it senses the very sudden difference in value. It's like an electronic scanner on an airplane at great altitudes that is used for photographic purposes.

The difference is there. I was making an enlargement the other day, and I can stand six feet away, and I can "judge" that focus. I don't try to think about it. I just scan the thing and judge. And then I go over it with my magnifier and I'm usually right. If I try to think, try to look at it and get down to see, "Now do I think this is the grain or it isn't?" it's not so accurate. This is a very interesting psychological factor.

Then the other thing is that the ideal perspective--say I take an eight by ten picture with a twelve inch lens and make a print, I get the perfect perspective effect if I look at it from twelve inches away. If I enlarge it to twenty inches in length, I can be twenty-four inches away. Well, I have a picture taken with my 23 1/2-inch lens of the "New Mexico Moonrise" enlarged five times--that's enlarged to fifty inches--my heavens, that should be in correct perspective at one hundred inches, roughly. But I can walk right up to it, within reading distance, and marvelous things happen; the whole thing opens up. The psychological effect you see is not just a physical--optical--one.

Teiser: When people read books the size of Fiat Lux*, do they hold them at arms' length, do you think, or do they hold them at regular reading distance?

Adams: I think regular reading distance. They hold them in their lap. You see people pull a picture away sometimes, but that's to suit the individual eye.

Teiser: Last Sunday, you were showing the students from Foothill College a very large print of a bull--

*The page size is approximately 10" by 13 1/2".

Adams: Yes.

Teiser: Well, wasn't that supposed to be a poster? Wasn't that supposed to be way up on a wall somewhere?

Adams: Well, it was used as such, and Europeans use a lot of stuff in posters, and they make big prints, and they're hung on walls in galleries. They have what are called "carrying power" when they're that big. A subtle little print like one of the Polaroids would be lost in a gallery of that kind.

But they don't care much for either print quality or spotting--it's very strange. The Europeans have a very poor concept of what we call print quality. They achieve things that are very theatrical in a very intense way--a very human way--I'm speaking of the good ones now, not the picturesque postcard shooting. But what we call print quality is like a beautiful piano and beautiful playing. They get the image and the meaning of the image, and primarily through reproduction because people in Europe don't buy prints. There are very few prints bought in Europe; very few fine prints around. You see European people come with a portfolio mostly of loose, unmounted prints. They get dog-eared and cracked, and it doesn't make any difference to them.

If that big picture of Half-Dome had a crack in the paper, I couldn't use it. I threw away four of those before I got one that was right. That's our standard! It's just like if I were a pianist I wouldn't let a record out with a false note. I might make some mistake, but if it's obviously a booboo then I would retape it. I don't know whether that's a logical comparison. What is quality? A great many photographers think that my work is a particular school of photography--very precious, where you overdo the print quality; that that isn't really necessary; that the only thing that counts is the image. Then you counter by saying that the image isn't excitingly presented. It just doesn't get over, it's not an appropriate or compelling print.

That bull picture is probably an appropriate print for the way the man saw it. I can't imagine making a so-called fine print of it because the image itself isn't a fine image. It's grainy and harsh. I don't know what you could do with it.

Teiser: Well, if you kept it down to a little tiny size, you wouldn't notice it so much.

Adams: The photographer gave me that, and I should mount it, because it'll get ruined. And as I say, it would be very good at a distance. But now my big prints are made for another purpose. They're big prints for their own sake, and you're supposed to be able to go up close to them. But you can't do that with most blowups.

Teiser: I think you were saying that the prints for The Family of Man were poor.

Adams: Oh, they were mostly terrible. That exhibit was a great blow to photography. They were just casually made. The pictures were selected for some theme, and the images themselves were mostly disgracefully bad, and the prints commercially done--no sympathy, no feeling for it at all. They were terrible. From our standards, they were just "commercial." The exhibit put photography back twenty years!

Now, there are several things that happened to augment this thing. The average blowup is terrible. The whole thing is conceptual, a big idea may need big prints. You should really photograph it--see something that you visualize as a large print. Well, when you do that, you must have a certain optical precision. If it's a poor negative, it just won't project. But sometimes, you have tonal qualities that you can get by with an image that isn't too sharp. But so much depends on the enlarging light.

There's quite a display up in Yosemite in the Mountain Room of rock climbing pictures. It really is quite an achievement. They're huge, and I know they're done with a four by five camera. They're much better than any I've ever seen. They're relatively soft. The definition is absolutely superb.

Well, I can go on forever on these things.

Light Sources and Light Measurement

Teiser: There's point source light, and then there's--?

Adams: There's condenser light--varying phases of condenser illumination. Point source uses a condenser; "point source" means a light of very small area. The average condenser uses a frosted globe, so it gives you a little more scattered light, but it still is primarily columnated. And diffuse light is just light that comes from a diffusing area.

Teiser: You were asking the students the other day if they used condenser enlargers.

Adams: You can usually tell, because you get blocked whites, high values. It's a matter of a pencil of light striking a small area of the negative and scattering. A certain percentage of this gets to the print and the rest is scattered beyond the picture area. And the

Adams: result is that the image of that particular high density is proportionately less than the actual diffuse density of the negative in that area. If you have enough shadows to hold low values, it doesn't make too much difference.

When you get a diffuse light, every section of that negative has myriads of pencils of light striking it; it scatters the light but it maintains its diffuse-density scale. In other words, if the negative scale is one to 1.7, then the image scale would be about 1.7 on the enlarger easel. The print could be soft. If you hold that scale, it would be soft. It could also be very rich in development and toning and still hold the scale, but the actual depth of tone would be greater. So we get up to an image scale of log 2.3, which is one to 200 arithmetically. You see, the densities are measured in log-to-the-base ten numbers. Some people are very confused by it. I just sent a memo to Polaroid. There's some people there that are a little mixed up. They've set their reflection densitometer to zero (0.0) for the white paper; it is really about 0.08. For several years, because of this setting, they don't get the same measurements I do from prints. I've got a well-calibrated Macbeth densitometer. They say, "We'll take your density and subtract this." Well, that's all right, but--when you think of the arithmetic equivalent, when you subtract logs, you divide, so you're getting a variation of one value to another, which can be a very perplexing thing, you see.

Well, the best explanation of this is if 2.0 is 100, and 1.0 is 10 and you subtract 1.0 from 2.0, you get 1.0, and that would be the log difference and represent arithmetic 10. Now, 2.0 is 100, 1.0 is 10; subtract 10 from 100 and you get 90. But 10 into 100 is 10, and not 90. (Maybe this is irrelevant for your project.)

Teiser: What would be the disadvantage of translating all those into ordinary arithmetic expressions?

Adams: I'm thinking very seriously of doing it, because--we talk in mixed ways. The engraver says, "I want a print of 1.5 range." That's roughly one to 32 arithmetically. So, we can talk about a range of about one to 32. The Zone System would work out just as well with arithmetic numbers. But H & D (Hurter and Driffield), who developed the sensitometer, just established the logarithmic value convention because it gives a much simpler curve than you get arithmetically, although it can be thought of as geometric. I think that sometimes people just perpetuate errors, because for the life of me I don't see why you couldn't use arithmetic numbers. I don't understand it. If you've got 100 and then 200, you've got a range of one to 2. You can express one to 2 in logs--one to 2 in logs would be a value of 0.3. If 0.0 is one, 0.3 would be 2, 0.6 is 4, 0.9 is 8, 1.2 is 16, and so on.

- Adams: You get to read the curves easily. I don't have any trouble with them. I can read them. You can get a lot out of just looking at the curve--its shape. But as that log system is geometric, and every step is 2X, I don't know why we can't call the steps 2, 4, 8, 16, and so on.
- Teiser: Perhaps when everything goes on the metric system, all that can be changed.
- Adams: Yes, but they won't change that. But it will be wonderful with computers. You can write in any log base you want.

That's why the camera can be a terrible thing. The camera is now taken for granted: own the most expensive camera! You assume if you buy it, it's got to work. The construction of them is really a technological marvel. And the lenses are superb; nothing has been made like them to date.

Technological Advances in Photographic Films

- Teiser: You were speaking the other day about film bases and so forth. And it occurred to me that you talked about the changes in printing papers but not much about the changes in films and their emulsions.
- Adams: Well, there's a progression from the beginning. Let's take the wet plate. First go back to the daguerreotype and the calotype. Then the wet plate and its collodion emulsion, it's sensitive to blue light only, and it had to be exposed and developed when wet. Collodion lasts a long, long time--it's perfectly good. But it had that great disadvantage.

Then back in the 1880s they developed the dry gelatin plate, and that was also sensitive only to blue light. Then they added dyes to the emulsion and rendered the plate sensitive to green light. That was called orthochromatic. The function of the dye is that while the silver halide responds only to blue light--radiant energy--the dye responds to green light, absorbs it, and transmits an energy to the halides, an amount of energy sufficient to reproduce images of both blue and green colors. Then came the panchromatic plate which had green- and red-sensitive dyes. And infrared requires another dye.

Later, of course, everything went panchromatic, although you can still get ortho. You can make panchromatic film of ortho type by using a minus-red filter. And then you can make panchromatic film blue-sensitive by using a C-5 filter--which cuts out all color but blue. The emulsions used to be fairly "thick." Nobody thought

Adams: of them as being thick, they were just that way. And they had what is known as the "gamma wavelength effect." The short wavelengths scattered very quickly near the surface and the green penetrated, say, half-way (just for the sake of argument). Therefore an image in green light would have higher density, and then the red rays would penetrate much further. The contrasts would be rather high with a red filter. That was apart from the color separations. So in the old one-shot cameras, you took three pictures at once, through the three different filters--blue, green, and red. You developed the green image normal, the blue image more, and the red image less to get the same contrast, or what is called "gamma" in the negatives. And that achieved the required color balance. Some of the earlier plates and films were extremely contrasty when made with a red filter. White clouds would be "burned out," and the sky would be very dark.

With Polaroid, which gives a surface image, you can use all the filters and you get only a small change of contrast. You get a change of values--the sky will be darker, the greens will be lighter, depending on what filter you use. But the whites will not increase in density to any extent. The shadows will be a little darker with a yellow, green, red filter, because they reduce the blue reflected light from the sky.

So most of our present film is known as thin-emulsion type; one film made by Kodak, Super-XX, has the older characteristics. It's quite valuable in some work, where we can expand by prolonged development. With an emulsion we can't expand as much because there is less silver in the emulsion. But on the other hand, we get a sharper image.

Teiser: When did that change come about, generally?

Adams: I would say, thin emulsions, within the last ten years. I know when I got the first thin emulsion pan film I was so mad I called up Kodak and I said, "You put that on Kleenex! I can't handle it. It just folds up in the developing tank! When are you going to use a heavier film base?" They said, "Mr. Adams, it's just the same film base, but the emulsion is that much thinner." They said, "We are changing the film base. We have to." It was too flimsy. You couldn't feed it into the developing reels. That may be a great shock to people who always thought the emulsion was always a very thin coating--whisper thin, you know. But it isn't; it's quite a structure.

[End Tape 8, Side 2]

[Begin Tape 9, Side 1]

Teiser: As I remember, at the time the thin emulsion films came out, there was some claim that they were of higher acutance.

Adams: Yes, they are. Well, I guess we can say that light scatters from a silver grain at a cosine 4 angle relationship to the direct ray. Some say it is a spherical diffusion. In Polaroid, the earlier positive-negative prints, the developing layer was fairly thick, so you had a loss of acuteness. You still would get all the resolution; if you look at it under a microscope you see so many lines per millimeter. But because the silver passes at an angle through the thickness of the developer, a difference of point of emergence to the point of exit, you'd see there'd be quite a little diffusion effect. With the old Ansco Superpan Supreme, which was a magnificent film in large sizes, when used in 35 millimeter size you couldn't get a sharp image except with a very long focus lens. With short focal length lens, the light would come in at an angle; the loss of acutance related to that angle. And the further away you were from the center of the film the worse the loss of definition would be.

Teiser: Meanwhile, the speeds of the film emulsions have...

Adams: They've improved speed. But of course that again is, in a sense, misunderstood. The emulsion speed is a pretty fixed thing, and you don't change it by development as some think you do; the ASA remains the same on the exposure index. I have to operate and work with Tri-X at 250 speed to get the density range I want. It's advertised at 320 and 400, but that's losing some shadow densities. Plus-X is advertised at 125; I use it at 64. Of course this means less development; you get a very smooth image.

Now if, say, 64 gives me a zone I value--proper density value--and I want to shoot at 125, that moves the exposure to Zone II; at 250 it moves up to III, and at 500 it moves up to IV. And that means I must increase development, so what is there is a general increase in density in other areas of the image. Also an increase in grain. You've seen many pictures where you have no shadow detail at all--say pictures taken at night, groups in nightclubs or theaters. They're actually empty shadows. They're shooting that film at something like maybe 1200, and ferociously overdeveloping it, and they lost all the shadow values.

Teiser: I suppose you could be accused of overexposure and underdevelopment, but that would be a subjective judgment.

Adams: Well, at higher speeds, developed in conventional process, I think it's Kodak's 8000, which is scientific film, there's not good image quality. Land has the 10,000-speed film for the oscilloscope,

Adams: which does its work beautifully but it couldn't be used very well in nature. Land actually had film at ASA 20,000--could photograph by starlight. Twenty thousand ASA is a pretty fast--you'd have a hard time not overexposing that under any normal lighting conditions.

Teiser: Are attempts being made to increase speed in a quality sense?

Adams: Oh yes, they're doing that all the time. But you come into some very complicated physical laws, I guess--quantum laws apply. I don't know; I'm not enough of a mathematician for that. But you see, there are two big objectives. One is to get away from silver. Silver is getting scarcer. Strangely enough, there's never been anything as light sensitive as silver halide. And you know that a halide is silver combined with bromine, chlorine, fluorine, or iodine. And, there's been nothing that can equal that. They've been experimenting with color-sensitive dyes and other strange concoctions, and they haven't gotten very far with it.

Electrostatic photography like Xerox has got some continuous tone, but it's not very good for general purpose; the equipment is cumbersome.

The next step will probably be light amplification. That is, a cathode tube like they use in astronomical photography. With it you are picking up the impulse of light, and you can magnify that as many times as you wish. You have it also when you go to a modern x-ray fluoroscope. They don't look through you any more and see your "shadow" on the screen. You're getting one-fiftieth of the dose, and they look at a television screen. This is because the very faint image that is generated can be amplified electrically. That may be the next step--where you'll have a very, very faint image which might be amplified in the camera or might be amplified out of camera. We don't know. But it will come.

Teiser: What speed films were you using when you started photographing?

Adams: Oh heavens, they were down to 25, 40, 32--I think 50 was a pretty high speed. Then they got to 100, and everybody gasped. The picture of the Golden Gate [1932] was done on Kodak Super Pancho-press, which I think had a Weston speed of 50, which would be 64 ASA. Pretty grainy, but it had fine quality.

Teiser: Those were the kinds of films that Oscar Barnack, who made the first 35 millimeter "candid" photographs, was using.

Adams: The first miniature, yes.

Adams: I have made prints from old negatives. I have a print of Arnold Genthe's picture of Chinatown--1904. It was done with a postcard Kodak, the film speed of which was probably 16. And this is as good as anything Cartier-Bresson ever did. It's absolutely magnificent. It is also a beautiful image. I mean, tonally. We got a gorgeous print out of it. Now that was just an orthochromatic film. And it was a very curly film. Noncurling it said, "n.c.," but it was better than the earlier film.

"The Negative is Like the Composer's Score"

Adams: There's always this problem of the photographer having to adjust. If I have a 35 millimeter camera, I see things a certain way, in relation to that camera. And I would compose, if I were a composer, for certain instruments. I wouldn't try to write something for the flute that would sound better on the pipe organ. (I mean, that's an extreme case.)

Then you go through all these processes. You just try to get the image that you want. Sometimes you know what it is, and sometimes you don't. You just feel your way. And a lot of photographers only view something--they don't really "see" it. They see you sitting there and they go "click." And then they have some empirical experience, so they get some usable exposure, but they still may have an awful lot of darkroom fussing to do. And many times they have no concern whatsoever for tonal quality or composition.

I had a girl working for me once who wanted to be a photographer. She'd done a little work. She made some proofs of my pictures, and I couldn't recognize them. Now, this is an interesting thing. She had absolutely no print sense. Could not make a print that had any value at all. And I was printing my own pictures of national parks, and I couldn't recognize them! Because I hadn't seen them just as a picture of the Big White Throne, but as a value composition. This thing would come out looking just awful.

Teiser: When you have someone working with you that way, do you ordinarily have a print to guide them by?

Adams: Well, I don't let them print. Liliane De Cock was the only one who really made very fine prints. And Gerry Sharpe could make a fine print. And I think my new man, Ted Organ, can make them, too. But he just thinks mostly of the work in his own field. But I have to make my own fine exhibit prints. Sometimes, with the special

Adams: edition prints, I can start it off, then have my assistant repeat; but even that has a very subtle difference. It's very hard to explain, to put your finger right on the problem. Edward Weston's boys made prints from his negatives. They were a little more brilliant, some of them were really "better," but in the main they don't look like Edward's prints. They don't have quite that feeling. It's very hard to describe.

I had to make an enlargement of one of Edward Weston's negatives for an exhibit. I had the print--it was very good--and he loaned me the negative. I had his print to go by. And I had one of the most difficult times in my life trying to make a print that felt a little like Edward's. I can make a print--no trouble in that. This was a pretty good negative--not too sharp; he'd never enlarged, you know. But to get that peculiar quality that was Edward Weston's--to even approach it--was tough!

And the same thing with the Clarence Kennedy pictures of sculpture. He had the most extraordinary feeling in the marble quality of his images. I've tried everything under the sun. I'm printing, I'm bleaching--I can't get that same "feeling." Of course, what really happened is that he didn't process things too accurately. In twenty, thirty years high values have bleached out a little. The high values as they are suggest sparkle and translucence, which is in a way an accident!

Teiser: That brings up the whole point of what is a negative, and how will it last? What should it stand for? What should its life be?

Adams: There's the recent trend (of course, like most trends, everything is overdone) for the "archival" as they call it. People are just going out of their minds in trying to process and protect the negative and print images, making the image totally permanent. Well, two hypo baths and selenium toning will make an image extremely permanent. If you mounted it on a bad board or subjected it to sulphur carrying boards, high acid boards and slip sheets, and other chemical conditions, you could do damage.

Now, I have some of my earlier negatives and prints that are fading; the ones made before we used the two fixing baths. But I seldom find a negative, even some I developed in the field, that shows deterioration. The early negatives, of course, were on nitrate base, which was very dangerous, because under humid conditions, if people didn't keep them properly, they would deteriorate into nitroglycerin. Kennedy had a whole bunch of negatives with paper separators in a drawer, and all of them were in almost liquid condition! If anybody would come there with a cigarette a dangerous fire could occur.

Adams: And I remember one time an air force captain, Albert Stevens, gave me a great big roll of outdated aerofilm. And he said, "Look, I just have to throw it away. So why don't you take it? You can cut it up and use it. It's fine stuff. It's just outdated and we can't use it; it'll last for a year or two if you keep it cool."

Well, I kept it around for three or four years, and I thought, "I'd better dispose of this," so I took it out in a sand lot in back of my house, dug a hole, and I put the cannister in it. I had an old flashpowder wick; I stuck that into the roll of film, and lit it and went to a safe distance. The fire looked like Old Faithful. The thing blew up, in roaring flames.

The Cleveland Clinic disaster in its x-ray department was of similar nature. The fire started, and then thousands of x-ray films, of nitrate base, exploded.

Then the manufacturers changed to acetate base, which is much more stable. The Golden Gate picture, for instance, has shrunk over a quarter of an inch in both dimensions. The acetate base has more stability.

Now Kodak has what they call the Estar base, which has extraordinary stability. It's a plastic--well, so's acetate, because they're all plastic of a kind.

Teiser: We were looking in the Friends of Photography gallery here in Carmel, at photographs by Frederick Evans. One of the captions said that his wife required that all of his negatives be destroyed on his death or her death.

Adams: No, they really weren't, because they've been making some prints from them. I guess his son kept them. Well now, maybe they copied his prints.

Teiser: It said they were made from positive slides for projection.

Adams: That may be right. There were positive slides, and they could make copies from those.

Teiser: I wonder, though, why would anyone want the negatives destroyed.

Adams: Well, it's a great problem we all have. Now, with Weston, his sons could carry on his work, in a sense. Now, I have a great many Yosemite pictures which are very valuable commercially for the family. And it would be terrible to destroy those. But take that white post and spandrel picture ["White Post, Columbia, California"]. I don't know who else could print that just that way. I have a certain feeling about it, and it takes quite a technique to get it, and if it wouldn't be my work, what good would the negative be? It

Adams: would be very easy to destroy all the negatives, except the ones that have historic value or scientific value, or some commercial value. But my "Moonrise" [Hernandez] print, unless it were made by me, it would have no value. There are hundreds of them. And so, if something happens to me and I can't print them any more, what do I do? My Portfolio V negatives are all canceled. I have an old canceling machine I got from the Wells Fargo Bank!

Teiser: That's the Varian portfolio?

Adams: No, Varian's was Portfolio IV. Portfolio V was limited to 110 copies only. That means I never can print any more of the images. The other day I found two or three prints, and I had to tear them up because they're not supposed to be out. And I have quite a number of them--extra ones that were mounted in case of disaster. And they really shouldn't be around, because my contract and my ethics say that there were just 110 things printed, and one hundred for sale. But I have a few temporarily. For instance, an accident happened to the one a client had; I could supply another. And I asked for the damaged print back, and that was destroyed, and I sent them another numbered the same. But I can do that up to a certain point, you see. But I'd have to have the other one back and destroy it, so there'd never be any more than the stated number of prints available.

Teiser: So, in effect, the negative stands for nothing in itself?

Adams: No. The negative is like the composer's score. The print is like the performance, but it's not a score that can be performed by others. We say that. Now, of course, it's perfectly possible that a photographer could come along and get more out of my prints. But the question is: would it be me? And the collector, the purchaser, and the expert, they want the original of the artist's work. Whether the other person doing it would do a better job is an ethical question that's very important.

Sometimes we get too precious, but it depends. I sell a print for, say, \$200, \$250. The price for a 16 by 20, after this fall, is going to be \$350.* Now, that has a rare value. I mean if a person buys a print by me and pays for it. That person is not going to be very happy if he sees another print out that's almost like it but doesn't have my signature. That's an ethical point.

*After September 1976 it is five hundred dollars for all prints 16 by 20 or smaller. [A.A.]

Adams: As far as the creation of a photograph goes, if you can divorce it from that element, then you should make as many as possible for as low a price as possible, if you want to get the message around.

Clarence Kennedy, after all his sculpture pictures were out, claimed he could do prints for fifteen or twenty cents apiece! He'd have a student printing them. But I think he tried it, but the prints didn't look like his pictures. There are all kinds of pictures of these sculptures around. There wasn't a thing he photographed that hadn't been photographed a thousand times. But he got something remarkable in his images, you see--a "spiritual" interpretation of the marble. Then the whole concept related to the original art element, and the creative photographic element. For instance, there are many pictures of Death Valley that are much sharper than anything Edward [Weston] ever did. Edward didn't worry too much about true sharpness. He didn't enlarge, he didn't have very good lenses until the end. And it didn't make any difference with the contact print--an old rectilinear lens gave a beautiful image. But you enlarge it two or three times, and it begins to "go to pieces."

But as I say, there's nothing worse than a very sharp image of a very fuzzy concept. [Laughter] That's one of the illusions that people have about Group f/64. Actually if we had stopped down everything to f/64, we couldn't make many enlargements, because at f/64 the diffraction patterns enter and the image isn't sharp. It just has great depth of field, which gives an illusion of sharpness.

Well, I think the reason that I went to the Art Center School was to teach, and the reason that the Zone System was developed was that I found that I couldn't teach anything but just the way I did it myself. And, as a musician and teacher, I was trained that you had to find out what the student had to say and help him say it his way. Because all hands are different and minds are different and feelings are different, so the function of a good teacher is to draw out, not necessarily to make the student imitate. One of the most successful teachers in Berkeley, Miss Simpson, taught with two pianos. And that's one of the most dangerous things you can do, because her students sounded just like she did. She would play a phrase and they would imitate it. But a teacher like Benjamin Moore, for instance, would never play for the student. He'd always ask you, "Now, do you really think that you have fully developed that phrase?" etc. And would give me other descriptive symbols, but would never play.

Frederick Zech was a pupil of Von Bülow. He was the most incredible technician. When he was eighty years old he could do chromatic double sixths which would put your hair on end. And he would sometimes show off, you know. "I want you to get your double

Adams: thirds,"--[makes a sound] "rruup," straight chromatic," and your double fourths"--"rruup," you know. And I'd go home with these things in mind and try to get it. But when it came to playing, he would talk about the playing, not play for you!

I remember doing some Liszt and he'd talk about everything in the world from pontifical moods to passion, to many things, but he never would play. He certainly could play it. He had this ability as a pianist, but he didn't want me to hear him and imitate him. That wasn't the job. I had to do it.

Teiser: So he had to teach you basic technique.

Adams: Well, the technique and the style is very complicated, because they're there and they guide you. That was the whole point of getting the person facile--but it's so easy to imitate. Some people play "by ear." They've heard something and they can imitate it. That isn't true individualism in music.

Well, the same thing in photography. You can set up your tripod, find the tripod holes in the ground your predecessor made, set up and do the picture, and you may get just as sharp an image, and with a lens of the same focal length you'll get everything optically the same.

Then comes the other thing--what kind of a print? I mean, how you carry the interpretation. You can lose the sense of your substance, rock; you can lose the sense of light. I don't know if I'm making any sense now. This is getting a little bit quasi-mystical.

Beauty or Therapy

Adams: But the photograph can be beautiful and personal. I think the sense of beauty in photographs belongs to a romantic age. I think the contemporary whole art spirit is really negative to photographic expression in the sense that I practice it (or vice versa). Very few people are making what we call beautiful prints, where the print itself is a beautiful object. They're making images--extraordinary, complex and sometimes very brilliant experiments. The image may be interesting, but the print inadequate. The idea is interesting. The actual print can be very ugly. And whether the idea would ever admit to a beautiful print being made of it, we don't know.

Adams: And of course a lot of the philosophy today is camera as therapy-- that was one of Minor White's points; presuming that everybody has problems and is a bit on the psychologically sick side. You had to explore yourself--little outgoing motivation. I think that bothers me more than anything. The fact of doing something for the outer world--as Beaumont Newhall said, "After all, pictures should be things to look at, not just experiments in vacuum cleaning your psyche." [Laughter]

Teiser: Well, it's communication.

Adams: It really is communication, and the communication depends pretty much on the state of mind or the condition of your compassion, and I think the trouble today is that there is a lack of compassion, which means mutual understanding and acceptance. These artists are so flagrantly--well, I could choose the word--dominating. It's a very difficult word to find. It's not a matter of being selfish, not a matter of being opinionated, but simply-- I guess you'd use the words "flamboyant insistence."

But one of the reasons that the painters have been holding onto these big galleries is that they're painting gigantic pictures, you see. Pictures half the size of the wall.

And I saw in Pasadena a beautifully hung show--a lot of contemporary things which were just structures--attached to the wall; some came out on the floor. And we had a joke here the other day, because there was some photographic paper that had not been developed. It had just been taken out--in long rolls. And of course they've turned color. It's a kind of a blue and a brown. So I thought if I could just set that up on a wall and exhibit it. During the whole exhibit, it would be different every day. It would change, fade and turn color. And it was just as interesting as some of the [Mark] Rothko things. [Doorbell rings--people enter]

Astronomical Photography and Videotape

Adams: Now, this man that's coming in is at the Jet Propulsion Laboratory. And he brings me moon pictures and Mars pictures. And he's a fascinating gentleman and very much interested in photography. I'd like to introduce him, because he represents another phase of work I'm interested in, moon and the Mars photography. I have quite a collection. He's Stanley Grotch, Ph.D. He is an analytical chemist at the Jet Propulsion Laboratory in Pasadena. They come up every once in a while to see us, and they're a wonderful family.

Adams: But anyway, the description of astronomical photography in plain and simple form is complicated enough, but now we have image-amplification and the radio telescope responses, plus satellite photography; the computer numerical system such as used by the Mariners where the picture is scanned and instead of an "image" they send numbers--it's a kind of a super-densitometer--the numbers relating to the areas of density of the image. And these numbers come in a continuous stream so they can be picked up by the computer and put in sequence and line. The scanner goes in one direction for the image. When it reverses it transmits the readings of the instruments on board, then it reverses direction again for the image and again returns with instrumental information. When you consider the whole electronic image is about twenty millimeters square, or 20 by 30 millimeters (and there's hundreds of lines scanning in that small area), and it travels thirty-five million miles or fifty million miles, you have a miracle. As somebody said, the energy received is much less than that used by a very small fly climbing up the window, and yet these pictures come out with amazing precision and clarity.

Then the image is put in a computer and translated into actual tonal values and can be "enhanced." The acuteness can be enhanced by the computer. The first moon pictures were produced that way. You saw the actual grains of sand and soil--actually fantastic. Hence the illusion of extreme definition through computer enhancement. That can be used in ordinary photography too, I imagine. It's really quite something!

Teiser: I've been wondering about the videotape system, where you put the image on tape.

Adams: Oh, that's a tremendous new field.

Teiser: Has it any possible future application to still photography?

Adams: Right now it is not so much still as moving. But there's no reason it couldn't be still. The whole cassette concept has really changed the world of television. Your live shows may be the exception. For instance, we could have a converter set on which we could show about anything we wanted, black and white or in color. We could rent or buy tape. And we could have the whole opera or a travelogue or a scientific lecture or a dissertation. Anything we wanted, we'd just put in this device and it is revealed on the screen. I've seen some trials and they're absolutely beautiful. Now there's no reason why I couldn't go out with a video machine that will give me an image, you see, on tape--a creative image. That could be moving or static. It could be a photograph of a photograph! And they did some very fine things in reproductions of works of art.

Adams: The first time I saw this tape system they used a van, and they did a picture at Glacier Point. It was a television series, and I was in it, and I had to come out and talk. They had focussed on the landscape, and they used filters just like I would. When finished with this, they said, "Well, I think we have it. Would you like to come in and see it?" I said, "Come and see what?" "Come see it in this bus." In this little room were two or three seats and a screen, and we saw the "take" and it was absolutely beautiful! The mountains were clear and sharp. The only thing is, my face was in shadow. It was out of the exposure range, and they could not hold values in the shadows. We had to do it all over again, with lights and reflections, and build up the shadow. It was a fantastic experience; the final results were remarkably well balanced.

All of that is one form of imagery, and photography is a form of imagery. I mean, what is a photograph but an image? Now we are doing three-dimensional photography. There was a show in San Francisco by Michael Bry. I was quite impressed with these big translucent panels hanging--moving in space with images on them. I mean, all these things are very moving if they're well done. First, they're all valid experiments in the laboratory. Now how many experiments are worth taking out of the laboratory and showing? The trouble today is they're showing too many things that still should be in the laboratory. As if I would rent Carnegie Hall and play the Clementi octave studies, you see. [Laughs] It's not that you wouldn't have a student gallery, but I'm speaking of public communication. Some things are so far-out, so far undeveloped that they don't belong in exhibits. Too many of our exhibits today are of that character.

Teiser: Is there any reason why you couldn't use videotape in a still camera?

Adams: Well, no, the principle is--well, what is a television camera? It's a cathode tube, which is scanning four hundred lines, or something, per second. I can put it on tape; I can compose, as I would a movie. I don't see why it couldn't be simply wonderful, why I couldn't go out with this camera and a finder, and whether this camera couldn't have the adjustments that we have with conventional equipment. I don't know why it couldn't. They use perfectly beautiful optical lenses, just about the same as camera lenses. I'd never know the difference if I used one on the camera.

I saw the big CBS studio when I was on the "Today" show--the lens, for instance, about that big (four inches across!) working about f/2. Twenty-four thousand dollars for a zoom lens--some fantastic figure--I don't think that's accurate; it may be a little less. But it was a very impressive amount. And they're picking up these images in color and when you see them on the monitors in the television control room they're really beautiful. They're sharp.

Adams: So most of your color, and even black and white, transmission you get is always of lesser quality than what you'd get in the station. Except when you have cable television; then you have, of course, much more accurate delivery.

So we're getting into another field now, but television is an image process. Being an image process, it has a direct relation to photography. And maybe the future of photography will be very closely allied to this technique. And I would very much like to have a television camera and do a tape which would go on a cassette, which would be a creative experience.

Teiser: Have you done any motion pictures?

Adams: Oh no, very little. I did a series in Yosemite years ago with a Zeiss Moviecon, which was a beautiful piece of equipment. It was like the Kodak 16 camera, and it had a shutter adjustment up to 1/1000 of a second, so you could take separate frames of 1/1000 per second exposure. I did details of water with a very high shutter speed on panatomic film and had that developed in para-phenylene-diamine, and had a print made and developed also in para-phenylene-diamine. It was the most beautiful image you've ever seen in your life. Beautiful color, warm, rich, and sharp. It burned up in the fire we had at Yosemite. It was only one hundred feet, but it proved a point to me. And then I never got back to it.

Brett Weston is home. Why don't you interview him,* maybe tomorrow?

Teiser: We were going to talk to Henry Gilpin--

Adams: Oh yes, that's good. Well, Brett Weston called me and told me he was back.

Teiser: I tried to get hold of your neighbor here, Dick McGraw.

Adams: Oh, he's gone, he's on a trip. Just left.

I'm thinking of--Fred Farr can give you conservation ideas--so can the Owings. I think you ought to do a tape on both Margaret and Nat [Nathaniel] Owings. They're remarkable people, and they

*A series of interviews with some friends and associates of Ansel Adams was taped. See Interview History.

Adams: have really a big background in everything. They'd be very fine in conservation and the environment.

At this moment, I'm sort of anathema to a large group of environmentalists because I insist on using common sense, and I won't get emotional about some of these things. I'm not a push-button liberal or environmentalist. I'd like to go on record. [Laughs] Things are getting really out of hand, and the backlash is going to be very distressing. People like Margaret and Nat are very wonderful, sensible people.

Teiser: You mentioned Garrod, and we'll try to speak to him.

Adams: Yes, Dick Garrod. He's the city planner at Monterey and he's good. McGraw is good. I think he--well, you get another side. He's an extremely critical person. We are very old friends, dear friends, but we scold each other, so he probably will give you some valuable but slightly negative ideas about what I should have done, and what I didn't do, and so on.

Rosario Mazzeo, he's quite important.

Teiser: Who is he?

Adams: He's a very fine musician, a clarinetist, and he was the first desk clarinet with the Boston Symphony, and the personnel manager as well. And he also is a very experienced photographer, especially in wildlife. And he's going to do more photography, I hope. Don't quote me--he's got a very good eye, but he doesn't know yet how to print. I scold him all the time. But both he and his wife are extraordinary musicians--she's a pianist. And Rosario's quite a force. I mean, he's a very potent gentleman. We've known each other now for twenty years, and he can give you all kinds of details of my life in Boston. I introduced the Lands to them, and I insisted on painting their dining room ceiling blue, which they liked very much because it made a terrible difference in the Boston stuffy apartments. This was a kind of Italianate space. I said, "Well, this room is kind of brown-gray dim. If you just take the ceiling and paint it blue, you'll have a sense of space." My God, Katy did it, and it looked beautiful. I kept my fingers crossed, because I am no decorator! [Laughs]

Anyway, he's somebody you might see, and he's somebody that really would deserve quite an interview in himself, because he works very closely with the University and at Tanglewood. Big musical background, very big. [Interruption]

- Adams: This is Dr. Stanley Grotch.* This is the oral biography project for The Bancroft Library. So if you have anything to say about me... [Laughs] I've been telling them about my interest in astronomical and satellite photography, and I have a total lack of technical knowledge about it, but a great interest.
- Grotch: Well, you've sort of come in at I guess the highlight of the whole thing--the renaissance, if you will. And probably the end of it for a while. We in it can see just another few more years of it, and that's probably going to be the end of it for a while. Within probably our creative life.
- V. Adams: What about the brilliant things we read about in the paper the other day?
- Adams: Supernova, they said.
- Grotch: I don't know much about it. It's not that we don't hear it, but we really know little more than anyone reading a paper. And you know, it's only when it comes in the scientific journals that you find out a little bit more in terms of technical details. It's a very specialized--
- Adams: What was exciting about this was that this was a real supernova, the first one observed for many years. Now with our knowledge of radio-astronomy, they know how to really look at such things.
- Grotch: Well, the whole field of communications--when these spacecraft get out there hundreds of millions of miles away, it's no mean trick to be able to pick up their signal--the radio signal. In fact, that's the only contact we have with them. And the technology for being able to do that is really an extraordinary one. Just simply being able to hear something transmitting with a few watts of power at several hundred million miles away.
- Adams: And the energy that comes in is about equivalent to a gnat slowly crawling up a window pane.
- Grotch: A drunken gnat. [Laughter] No, the whole technology of being able to do that--and that of course has gone over into this area of radio-astronomy--of being able to pick out these extremely weak sources--is incredible.
- Adams: She was asking about photography--extending photography into different fields. I was talking about computer enhancement, digital frequencies and--

*See also p. 221.

Grotch: I think they're only just beginning now to scratch the surface. It's really remarkable that the whole thing has existed, maybe, ten years. It's so new, and it's changing so rapidly as more people get into it. It's very hard to see it. One doesn't see it yet as a creative kind of thing, perhaps because the people who are in it are basically not artistic as such, but are more scientific.

You know, the guys at JPL [the Jet Propulsion Laboratory in Pasadena], when I mentioned I might see you this weekend, said you've got to come and see some of the facilities they have there for doing exactly what you're saying--computer processing.

[End Tape 9, Side 1]

Early Years in Yosemite

[Interview VIII -- 29 May 1972]
[Begin Tape 9, Side 2]

[Mr. and Mrs. Adams. Mrs. Adams alone at the beginning.]

Teiser: When did you meet your husband?

V. Adams: I don't know--1923 maybe. I don't know. You know, my father had that shop and studio* in Yosemite Valley. Mother died, and I was taking care of the house. And we had a piano. Not many people in the valley at that time had a piano. This was an old square Chickering. There was a ranger-naturalist named Ansel Hall, and so one day he brought this young man in. He said, "I'm going to bring in my namesake. And he'd like to play on your piano." And I thought--you know, namesake. To my mind, it was the last name, and I kept wanting to say, "Mr. Hall." It seemed to me to be the natural thing to do. It took me awhile to realize it was the first name.

Well anyway, Ansel was acting as custodian at the LeConte Memorial in the valley, and his custom was to take photographs for a month after this summer in the valley, and then go back home to San Francisco, and he'd spend weeks developing all the pictures he'd made. You know, there was no darkroom in Yosemite then. That was just in the bathroom, you know--things were simple like that.

*The Best Studio. Mrs. Adams's father was Harry C. Best, the artist, who established the studio in 1902. He died in 1936.

V. Adams: Then he'd go back to practicing again. He used to practice eight hours a day in fall and winter so that--well, when he was really going on his practicing, he'd start in the morning--his father would leave for the office about eight-thirty--and then he'd go into the living room and practice. (This was in San Francisco.) And about ten-thirty he'd go out in the kitchen and he'd make tea for his mother and his aunt and himself--that gave him a break, you see--and then he'd go back until half past eleven or twelve, and then it was lunchtime, and then he'd practice in the afternoon too.

Well anyway, to go back to Yosemite, he had no piano up there, and he was delighted at the idea of having one--not to practice on but to sit and play a little bit. And it took me quite awhile before I realized that it wasn't only the piano that brought him down to the--[laughter] Because I just really wasn't emotionally ready to get interested in anybody, and didn't believe anybody'd be interested in me.

So he'd come down--it's about a mile, mile and a quarter, maybe--from the LeConte Lodge to the old village. He came down fairly often. He used to make the excuse that he had to go over to the government warehouse to get something, and they used to tease him about that. It was his excuse to get out and do something else. [Laughter]

So that's when I first met him--and sort of the second year, I was amazed that he was really interested in me. It took me awhile to really respond. I just thought I wasn't ready for it. And then when we did get engaged, I went down to see his family in San Francisco and visited with them. Dad and I lived in San Diego in the winter time, and so we'd stop by on the way up or down. That's the first time I can think of meeting his family.

Teiser: Was he photographing then?

V. Adams: Well, he'd go out for a month on a trip after he'd had the summer in the valley and photograph, and then he'd come back with the pictures. He'd go with some other young man and a donkey or two.

Teiser: At some point fairly early he had started making prints for your--

V. Adams: Shop, yes. He did that. [Speaks to A.A.] Are you ready now, darling? All right.

Adams: [In the distance] Not quite.

V. Adams: Yes, he did. I mean, after we got engaged. Here was an opportunity to make a little money. Nobody had any money in those days, you know.

V. Adams: [Aside] Ansel, I'm going to go in about one-half minute, unless you can think of something I can do for you. I can stay--

Adams: You can help by correcting my dates.

V. Adams: No. [To Teiser] Ask me some more, I'm full of facts.

Teiser: What were the pictures he started making that you sold?

V. Adams: Oh, of Yosemite. Not so much of the high country, because I don't think Dad thought they would sell as well. Pictures of the valley, and nice delicate little scenes in the forest.

Teiser: Small prints?

V. Adams: Yes. Some were four by five mounted on a bigger card, and some I guess were maybe eight by ten and ten by twelve, but nothing like these big things at all.

Teiser: Do any of those still exist? Do you have any of them?

V. Adams: I don't think that I have. I don't know. We'll have to ask Ansel. It may be that there are some. I know Nancy Newhall tried to find all sorts of things from early days [when she was gathering material for The Eloquent Light].

Teiser: Incidentally, you asked if we'd like to see some of those papers, and maybe sometime we would.

V. Adams: Well, I know she sent back a lot of things. We'll have to ask Jim where he filed them away.* There were many things she took east right in the beginning. Then they had a big fire in Rochester, and there was smoke damage on some things, and things that I didn't know what had happened to them turned up to be safe and came back west again.

But I know there are lots and lots of things, and I've got pictures and pictures and pictures.

Teiser: We were speaking this morning to Mr. Mazzeo...

V. Adams: The Mazzeos knew Ansel when he'd go to Boston, and I didn't get east. I had to stay here and run the shop in Yosemite, so I didn't get out very much. He said he's got a beautiful tape of Ansel's playing that someday he's going to try to put together. He can't do it now because of his hands--arthritis.

*A lot of material is now in my vault. [A.A.]

- V. Adams: [Calling] Ansel, come back now; it's your turn. [To A.A., who had come in] Was that '23 when you and I met, when Ansel Hall introduced us?
- Adams: No, I think it was before that. I first came there in 1916. I had been laid up with the flu, and I read [James M.] Hutchings's book, In the Heart of the Sierras, and got very excited. The family was going to take a vacation, and I said, "Well, why not go to Yosemite?"
- V. Adams: Was that the first time they visited Yosemite?
- Adams: Yes, 1916.
- V. Adams: Because they went almost every year afterwards.*
- Adams: None of the family had been there earlier except my grandmother had in 1870. We were there for the first vacation. I think it was four weeks long.
- Teiser: Was it as good as Hutchings said it was going to be?
- Adams: Oh, much more so. Yes. But Hutchings had a definite control, though--a mood. We took walks up in the Little Yosemite Valley, and then up the Yosemite Falls trail, and I remember seeing Joe LeConte running down with his family one afternoon.
- Teiser: Helen LeConte** said that he said that you had met in 1916; she didn't remember, but he said you had.
- Adams: It was on the Yosemite Falls trail in 1916.
- V. Adams: I didn't realize that.
- Adams: We went to the Big Trees. We then left by way of Miami Lodge, stayed there, and then on to Raymond.
- V. Adams: They went by auto stage.
- Adams: Coming in you'd take the Pullman at eight o'clock in the morning from Oakland. You'd get to Merced around noon, and they'd connect the car to the Yosemite Valley Railroad, and then you'd puff up the Merced River to El Portal, which was hotter than the hinges of the hereafter! We stayed overnight at the El Portal Hotel.

*In 1917, '18, '19, and '20. [A.A.]

**Joseph N. LeConte's daughter. See her Reminiscences, a Sierra Club interview completed in 1977.

V. Adams: They arranged it so they got to see lots of scenery.

Adams: We came in early in the morning in big white buses.

V. Adams: Well, it's very beautiful coming in the morning.

Adams: Yes, marvelous. And we arrived at Camp Curry. And an old fake, Mr. [D.A.] Curry, roaming around, greeting people and shouting at night for the fire fall. It was real circus stuff. And we had tent #305--

V. Adams: Oh, you did? [Laughter]

Adams: And I think it was that afternoon that I fell off a stump. I got up on a stump which was rotten. I was trying to take a picture of Half Dome. I fell off, and on the way down I clicked the camera-- a little Number One Brownie--and got a completely upside down picture. Mr. [A.C.] Pillsbury developed the film--couldn't understand how that picture was upside down. "What did you do-- hold it over your head?" And I said, "No, I fell off a stump." I think from that time on he thought I was a liar. I knew him for many years.

Teiser: Who else, however, could have got a picture at all? [Laughs]

Adams: It's a good picture. I've got the negative somewhere. [Laughter]

And, oh, I don't know...we did all the things. And then I came back with my mother the next year, and that's when I met Mr. [Francis] Holman and went on my first camping trip. Bessie Pond and the Admiral...

V. Adams: Admiral Pond.

Adams: I forget. Bessie [Elizabeth Keith] Pond and a Miss Smith, a Scotch lady. I guess the admiral [Charles F. Pond] was there, and some other friend. It was raining; and, oh, Merced Lake was very dismal. It cleared up that night, and the next morning I remember climbing up the ridge. We camped between Lake Merced and Lake Washburn at a bend in the river, and a big glaciated ridge, right out to the north. I climbed up at dawn, and there were all those crags under Mount Clark, all shining in the sunrise, and that "did it." [Pause] That entrapped me forever. We didn't climb Mount Clark that year. We went to Lake Washburn and Babcock Lake and Fletcher Creek Dome and returned to Yosemite Valley.

Mountain Trips with Francis Holman

Adams: Then the next year I was there with my mother, who stayed at Camp Curry, and Mr. Holman and I went on many trips. And an old friend, Mr. Schu, a farmer, was with us. And oh boy, we did some real scrambles. We got up at dawn and got going with our donkeys. We would get in at dark and set up camp, and dinner was a mixture of ants and cinders and hash or whatever it was.

V. Adams: Who did the cooking?

Adams: Everybody sort of pitched in. We had nothing but coffee cans with wires as holders; we had one frying pan, the coffee pot, and several kettles--tin cans only. And of course, they'd get all blackened. So it was quite a job to keep it clean. And then we'd travel or climb all day.

V. Adams: Where did you go--Merced Lake?

Adams: Oh yes. Well, Merced Lake and Tuolumne Pass and the Young Lakes. One year, I forget, we got stuck out in the first snowstorm of the season in October. We had to get out very fast so nobody got stuck. Went all the way from Young Lakes to Yosemite--

V. Adams: That's a long way. That's a hard day.

Adams: We were a tired bunch of animals and people. It was terrible. That was more than twenty-eight miles. And the first four or five miles was through about a foot of fresh snow. And we were scared to death, because if the snow got too deep, the animals would flounder in it, and we'd be taking everything off and junking it and trying to see how far we could take the animals without anything in their packs.

And on another trip we went over Isberg Pass to the Minarets, and all around the Minarets, Mount Ritter, Iron Mountain, and Koip Pass. In fact, we were often out of the park, in national forest areas, but never got to the southern Sierras, never went below Minaret Summit.

Ted Organ: Were you on the first ascent of any of those peaks?

Adams: Oh, I climbed one of the Minarets--but I don't think it was an important climb.

V. Adams: That was before people did formal climbing.



"Ansel bringing in the biscuits."
Camp on summit of Cooper Pass,
California, 1926. Sierra Club
trip.

Left to right: Admiral Charles
Fremont Pond, Helen LeConte,
May Isabel Wocker, May Elizabeth
Plehn, Ansel Adams, four donkeys.



Photograph by Christine L. Reid

Ansel Adams, guest speaker,
Annual meeting of the Friends
of The Bancroft Library,
May 14, 1967.



Photograph by J. Malcolm Greaney

Ansel Adams, Juneau, Alaska, 1947

Adams: I've got my name in a number of registers. At first there was no record kept; I can't believe that people hadn't climbed a lot, especially the shepherds. They were in the country for months at a time. And all the packers, they thought we were just crazy to walk. The people would go along the trail riding horses. They were called "horse muckers." The real elite was the campers, going along with the donkeys, walking.

V. Adams: What were you?

Adams: I was the elite. I was just walking on the ground and had a donkey or a mule for my outfit. But the ones who rode, with guides and things, they were "intruders" [laughs] and "softies."

We climbed all kinds of things. We had a very dangerous ascent of the gorge east of Lake Washburn. And our technique was just scrambling--we had a World War I trench pick, and long window sash cords--you know, the kind that hold up the weights in windows--which at that time were the strongest material available. We'd just tie ourselves together with those and climb together! Of course, if you ever fell on it, you would just cut yourself right in two; they were only about one-eighth of an inch thick! We had no knowledge of climbing and we came so close to disaster so many times, I'd hate to tell you.

And the worst of all was the gorge in the southeast end of Lake Washburn. It's just a fault line on a cliff leading up to a little lake at the top (it's about sixteen hundred to eighteen hundred feet long). Holman said, "There's a couple of small chock stones in there." Chock stones are stones that have fallen down and wedged in the gorge, which was about 70° to 80° steep.

So we started out on a real scramble. We didn't think anything of it at all; at first I could just go all day long climbing. I guess it was kind of a tough place, and we came upon the first chock stone. And there was no way of getting under it, so we had to go up the face of the gorge wall. The top of the face of the wall in that case was about as high as this ceiling, sixteen feet. But at this angle, if you let go, you'd go down about two hundred feet. Looking down was a bit distracting.

We got over that, and I began to tremble; "How do we get back?" Because, you know, climbing is one thing, and getting down is another. And then there was another chock stone and a bigger one. Mr. Holman said, "Well, we can't go back, we've got to go on." So we had to start climbing this wall again, and it was really pretty dangerous this time. And of course, no one had an idea of how to belay and protect yourself.

Adams: I'd get ahead (I was a little more agile), and then I'd sort of help pull Mr. Holman up, but if he fell I couldn't have held him. We got up over that difficulty and thought we were almost up, and then there was another chock stone, and this was the big one. And that vertical wall was something! It was about one hundred feet high--straight up!

And we got over that, and we knew there weren't any more, because we could see the top. But talk about being scared! The feeling of being trapped at a late hour, and no place to lie down; it was so steep it was hard even to sit.

V. Adams: Where were you?

Adams: This gorge east of Lake Washburn.

We finally came out on top. Glory Hallelujah! We decided we wouldn't do anything like that again without knowing what we were getting into.

Of course, there wouldn't be anything to it today. I mean, you would protect against exposure. If you couldn't give a person a safe body belay, you'd drive in a piton and secure the rope thereto.

V. Adams: They didn't have equipment then.

Adams: Nobody knew anything about real climbing in those days.

Teiser: Who was Mr. Holman?

Adams: Frank [Francis] Holman was a mining engineer who lost an eye at the age of twelve, and he had, with his one very sharp eagle eye, remarkable vision. He'd been in South America, and I guess he'd done pretty well for himself. He was an old bachelor. He could be very crusty. But a very distinguished man.

V. Adams: How did you and he get together?

Adams: I think it was through Bessie Pond.

V. Adams: He wasn't at LeConte Memorial first?

Adams: Oh no.

V. Adams: You took that together?

Adams: I took that myself first for several years, and he came and stayed with me.

Teiser: Where?

V. Adams: LeConte Memorial. He had his quarters there in summer.

Adams: And then, I forget where he'd spend the winters.

And then my aunt, my father's brother's second wife, met him; she was a professional nurse. And they became companions.

V. Adams: She'd read to him and write his letters because he couldn't see too well to write.

Adams: This was after his strenuous climbing days. His eye was giving out.

So I was taking care of LeConte Memorial for several years, and then he joined with me, and finally he and my aunt said they'd take it over. Then I went with the LeConte family for two summers--or was it three?--to the southern Sierra.

V. Adams: They could camp behind the lodge at that time--

Adams: Oh yes, we had a nice little camp there.

V. Adams: They allowed it at that time, to camp right behind the lodge, behind LeConte Memorial. Now you can't.

Adams: We had a regular camp set up: kitchen, camp stove. We would stake the donkey out in Stoneman Meadow.

V. Adams: Finally they even got to taking a cook out with them, Aunt Beth [Adams] and Mr. Holman. They'd come down here to Carmel for the winter, and they'd take a house that had two wings. They each had to live their own lives, and yet she was a good companion to him.

Adams: We took her on trips. One night up at Triple Creek Fork, the coyotes let loose. She came over from the designated women's camp, which was about (very properly) three hundred feet away, about midnight. It was moonlit and these coyotes were just going strong! And she said, "I don't care, but I am going to move in with you men. I'm scared." [Laughter]

Then we lost the donkey. The donkey ran down Triple Creek and away home, and they can run faster than we can if they want to run, and Mr. Holman had a marvelous string of repetitive profanity. The whole canyon ringing with a combination of entreaties to the donkey and consignments of the donkey to inconceivable areas. [Laughter]

Adams: Once the donkey got stuck on a steep cliff; we had an awful time getting it out of trouble. Tied it to a belay with a hack rope, and it fell down several times. It was belayed by the wall. We'd get it to its feet, and it would scramble along the very steep granite.

Now there's a trail indicated there. But that was a really tough place to get up with an animal. Of course, I'd take everything off the animal and carry things up. The work we did was just tremendous--just sheer physical toil.

Perils and Close Calls

Adams: For instance, we'd climb Red, Gray, and Mount Clark in one day. We'd leave camp about four-thirty in the morning. Those are three peaks in the Merced Group. That was a pretty strenuous deal, you know. Lost the camp (many people lost Illilouette Valley), found it about ten o'clock at night!

That's the time we had the fall on Red Peak. We were going up with the old ice pick and the window sash cords, chopping little steps. It was frozen snow, it wasn't ice, and about a thousand steep feet of it. About eight hundred feet up, I slipped. And of course I started to slide--it was about 60° to 70° steep--pulled Mr. Holman off his feet, and we both went down. He was yelling, "Keep your feet front--front! Don't roll!" And finally we got down. We were sliding face-down, and if you just touched your hands to the frozen snow it would take the skin off. We were really going awfully fast. And there was a whole lot of rock and snow piled at the bottom, and we went right through that--but missed all the rocks! Mr. Holman sort of sat there and rubbed the snow out of his eyes and said, "Well, we'll go right up again." That was the best philosophy. So back we went.

Then we came down the Red Peak ridge, and kept on the connecting ridge, and up to Gray Peak and down that connecting ridge, over to Mount Clark. Mount Clark was very steep stone and snow on the eastern side. And the top of it was a little broken crag. It's one of the great Yosemite mountains. When we got down to the base of Mount Clark, we came out three miles below camp, which was worse because we had to go uphill--up the trail--to get to our camp. And everything looks alike in that place in the lodge pole forest.

So, let's see. What else did Mr. Holman and I do? Well, we climbed everything around Yosemite. He was a great ornithologist. One harrowing experience was in the Lyell Fork of the Merced. He

Adams: had a little collector's gun. He just hated to shoot birds, but the Academy of Sciences gave him this commission for collecting. And he had a can of arsenic salts with which to cure the skins. We would shoot a bird and feel very sad about it. He would very carefully skin it, and save all the feathers and everything, and then rub the inside of the skin with the arsenic salt. And then wrap it all up in some material so that it wouldn't dry out. He kept the arsenic in a large salt shaker.

Well, one night at a campfire, we were frying some fish or hash and it was quite dark. I got hold of this salt shaker, you see, and I put some salt on the fish. And at that time, he threw some twigs on the fire and the fire came up, and I said, "This is funny. The salt looks green." I'd gotten hold of the arsenic, and I've never seen anybody so disturbed as Frank Holman! He just took that arsenic and hid it. But that shows how easy it is to have something happen to you. He just had it in a salt shaker and, oh my!

V. Adams: Like the time that you were at Merced Lake and you had a tummy ache.

Adams: If I'd known it was an appendicitis, I would have died of fright. I was in terrible pain. Drank a whole bucket of water, all alone. A storm was coming up. I was not expected back for four days. I'd been up to Isberg Pass and Isberg Peak, came late to the camp, went down to get some water at the river, and it was just like a knife sticking in me. I thought, "Oh, ptomaine poisoning." I felt terrible, you know. All of a sudden. I'd eaten nothing but grape nuts and a can of condensed milk. I was on the simplest possible diet. I had this fever coming on, and this pain, and the only thing I could think of to do was to drink water. So I just got a bucket of water and went up to our lean-to and just lay there and drank; all instinctively. And then about midnight the fever broke, and I was drenched, and it was thundering outside and the lean-to was leaking. I was so weak for a day, I could barely move around. I tried to get home but could not manage it.

V. Adams: You said you went to the river and the bridge was under water.

Adams: Yes, the log we used to get over the river was under water for eight days. I never would have made it home. That was for certain. So I had the good sense not to get panicked, and spent the night, and that's when I drank the water.

Then the next day I just realized, "Well, I'm all right. There's no more pain." The day after, I returned to Yosemite. That was what I got at Taos in 1930.

V. Adams: When you knew it was appendicitis.

Adams: I got exactly the same thing in the morning--terrible pains. And the doctor came and put an ice pack on me and took me off to Albuquerque for an operation. But I know if I had known in Yosemite it was appendicitis, I'd have simply died of fright.

Of course, the other tragic thing was, say, if I'd had a pill; say I'd taken a cascara or something, that might have killed me. So they'd come up and find me dead of natural causes in a wet lean-to. [Laughs]

Teiser: Did you often go out alone?

Adams: Oh yes. That was very bad to do.

V. Adams: They didn't really talk about that as much as they do now; people are prepared now.

Adams: You always tell people where you're going. But I just told my aunt, "I'm going to Merced Lake. I'm going to try to climb Mount Clark, and I'll be back in three days." Well, I got so enthusiastic. Met some trail workers, and I asked them if they'd tell my aunt that I'm going to stay two more days. I went up Isberg Pass. So if I had not shown up people would have come for me. They would have probably given me a day's leeway and then called the rangers or something. But how do you know where anybody is? You just go to Merced Lake country and start climbing. My God. You never could find anybody, unless they were yelling or had built a fire or made smoke in daytime.

So now we go off on well-known routes. I wouldn't mind taking a trip specifically to Half Dome alone, if I could describe where I was going--pinpoint it. Remember that time with the Sierra Club when I said I was going to the Second Recess of Mono Creek? (There's four canyons called the Mono Recesses.) I was going up the Second Recess and cross over and come down the First Recess. And take my camera, of course. I promised I wouldn't go anywhere else. The only thing I forgot was--I hadn't looked carefully at the map; the Second Recess was twice as long as the first one. So I thought I climbed awfully high, and I got over a pass and went down about two thousand feet and looked up. And there was the Seven Gables--mountains to the south--and I realized what I'd done--I'd crossed the whole divide. I'd gone over the main divide, you see. It's just like having two canyons; instead of crossing over into the First Recess, I went all the way up the Second Recess--a real struggle! And the last bit of it was something terrible. I had a bad time getting back to camp--tried one "draw" after another because of cliffs on the other side. I never did get to the First Recess. I got back to the Second Recess, because the First Recess was too far to the west.

Adams: I got home about midnight, very sheepish. Because I'd given people a lecture on doing exactly what you said you'd do, you see. And of course I hadn't used my brain; I'd done exactly the opposite. I'd gone out of the proper canyon--and there again, if anything had happened, nobody would have found me. They would have gone up and looked at the map and crossed over and looked all around that area, which I never was in! I was at least five to eight miles off my stated route!

V. Adams: It wasn't your fate to die in the mountains.

Adams: No. And I nearly fell off several things. The time the piton came out when I practiced climbing at Benson Lake.

V. Adams: Yes. That was one of the worst things.

Adams: They had a rock climbing practice, and Glen Dawson was holding the rope down in the meadow. It was a very long rope--a light rope that went through a piton. It was set between a great big rock, twice as big as this table, laying against the cliff on a ledge. They'd driven this big piton between the cliff and rock all the way. The rope ran through it. People would climb and get up fifty or eighty feet and then give up and be eased down on the rope.

V. Adams: Everybody was learning from it.

Adams: And they'd fall on the rope, you see, and the man in the meadow would hold them; then they'd slide down or start over again.

Well, it was about two hundred feet--180 feet high, I guess, with a lot of sharp rocks at the bottom. And I failed it. I couldn't do it twice. I asked Glen Dawson if he would hold the rope once more. I just felt I couldn't let this thing beat me. Then I got up nearly to the top, and I was terribly tired, and I rested by leaning forward on the ledge. It was an all vertical climb. As I leaned my weight on my arm, I heard a tinkle and a sliding sound, and down comes the piton with the rope. And the rope catches over a point and sticks. If the rope had fallen it would have dragged me off, because it was pretty heavy, you know--a hundred feet or more of rope. Here I was completely without any support. One's reactions are all automatic. I got up to the ledge by just sheer clawing at the rock, and held up the piton that had come out.

And I'll never forget Glen's face. It was dusk. He just turned white. This little figure down there with this white face. I still remember that.

Well, then they had to send somebody up high and around and let a rope down to me--two hundred feet or so, quite a bit. And then belay it with a fresh piton so we could get down. That was a close one.

Teiser: Glen Dawson the bookseller?

Adams: Yes. What happened was, everybody falling on the rope had levered this rock a little, widening this crack just enough so that when I took my weight off the rope (the crack being at a slant) the piton just fell out.

Sierra Club Trips

V. Adams: Wasn't that the same trip where somebody--a girl--was drowned, and we kept trying with the short-wave radio, which was a new thing to carry along, to get to the rangers?

Adams: Yes. She fell in Benson Lake. Oh, we had a lot of accidents. I remember two fatal and two bad falling near-fatalities, and plenty of heart attacks, intestinal obstructions and double pneumonia, etc.

V. Adams: That belongs in Sierra Club history.

Adams: We always had a doctor. We always brought an intern along as a camp doctor, but then we had some very fine practitioners who were guests, and of course in an emergency they'd come out and help--Dr. Walter Alvarez and Dr. Herbert Evans, for example.

I remember one time, a man was climbing, and put his hand up, and somebody was up ahead. That's very bad too, to climb too close ahead. He loosened this rock, and it came down and hit him right in the hand, literally went through his hand--broke everything. So this poor guy--we had to get him down to camp.

The intern was really having a fit. He was just a medical student, he wasn't even an intern. And the nurse said, "Well, just get hot saline water and keep it wrapped in it." They had to tell him to get out as quick as he could and apply these compresses constantly. In those days, you know, they didn't have penicillin or anything.

V. Adams: The packers would take them out.

Adams: They'd strap them on the saddle and lead them out, and they'd have to go many miles.

V. Adams: They'd have to go to Lone Pine or to Sequoia National Park.

Adams: But this man kept the use of his hand. They had to practically rebuild that hand. It just shows you what can happen. Now, if you were alone, or it was just a small part, you can imagine what might happen.

Well, they did have that awful thing years ago in the Palisade basin, where a woman was climbing the North Palisade. While in the talus, one of those huge rocks rolled over and caught her, right on the pelvic area and broke both pelvic bones. So they had to improvise a stretcher and carried her with great difficulty more than three miles above timber line to the trail. It was the roughest possible terrain. She was pretty well crippled for life. I remember Mr. [William E.] Colby telling me that. It took five days in all to get her to the Owens Valley.

Then a woman had a heart attack when we were near Ralph Merritt's camp. The woman knew she had a heart condition and asked the packer if he thought she'd get along all right. Well, how did he know? He wasn't any doctor. We had horses anyway. I forget what it was--some form of heart failure. She got up to Sphinx Pass and practically passed out from the attack. She was six weeks in Ralph Merritt's camp, and finally the doctors came in and said, "Well, I think we can take you out now." And it was a two thousand foot climb back over Sphinx Pass. When she got there (with less oxygen) she expired right on top of the pass.

V. Adams: You know what I remember about that is that all of these young husky boys who were part of a rescue group, in groups of four carrying the litter down the slope, and they'd change take-over after a little while, carrying her down. She'd had six weeks or four weeks or however long it was down at that camp in the flatlands, but those boys just worked like mad to get her there and also to get her out. It was just so sad, because everybody tried so hard, and then when the final thing happened, it wasn't any good after all.

Adams: I don't want to give the impression that we had nothing but disaster, but--

V. Adams: No. We had lots of wonderful things.

Adams: Always things may happen in an outing of one hundred or two hundred people.

V. Adams: People have gone on long trips and nothing has happened.

Adams: But I think we--well, we had that case of old Mr. Padway, who saved up for several years for this big vacation. He was some kind of a specialist and couldn't get away from work, and finally

Adams: he did and this was a four-weeks vacation. We were up at Milestone Camp, which is over eleven thousand feet, and he had this very bad cold; it was freezing, and the camp doctor didn't like the way he sounded. I think Dr. Alvarez came to see him, and they got another doctor and they listened, and then they came over to see us. They said, "He's got pneumonia, and if you don't get him out of here, he'll be dead in twelve hours because of this altitude." (Low oxygen.) They said, "It's very important. You'll have to get him out some way." Of course, that was before helicopters.

So [Clair S.] Tappaan and I went to him and said, "Well, Mr. Padway, we're really sorry, but the doctors have ordered you out and we'll have to make arrangements right now to bundle you up and get you on a horse."

"What! I've got nothing but a bad cold. I'll be over this in a day or so." (Cough, cough)

"Well," we said, "the doctors don't say that. They said you have pneumonia."

He said, "I refuse to believe it, and you'll have to order me out."

We said, "Well, we'll have to send you out."

He said, "If you do that, I'll sue you."

Tap was a lawyer, so I said, "Well?" We went back to the doctors and told them. They said, "We'll give you an affidavit. If you don't get him out of here, in eight hours he'll be dead."

So we got him to Fresno, and he just barely made it. And his letter of apology was touching, because he felt that he caused all this trouble. They did save his life, and our insistence was important. But he never realized it at the time. He didn't want to realize it. It would spoil his trip.

V. Adams: There was one trek--I wasn't on this trip--when you went across country and it was very high and very cold, and a couple of people nearly didn't make it. The altitude and the whole thing got them. But outside of that, when you think one hundred people go every summer on these trips for forty years and most of them do beautifully.

Adams: Well, it's not a compensation, you see. Your oxygen supply goes down. In Yosemite you have three-quarters normal, I think, and you get up to Glacier Point--eight thousand or nine thousand, somewhere in there--you only have about half. No, it's more nearly ten thousand that you have half. And it diminishes as altitude increases.

Adams: Well, I can compensate very quickly, because I'm always going from high to low altitudes. But for some people it takes several days. And this mountain sickness is just sort of a breakdown of body functions, because there just isn't really enough oxygen for them. Everything is knocked out of sync. The heart has an automatic trigger device, and if it works too hard, it automatically just slows up, or may temporarily fail. It doesn't mean there's definite damage. But you can have some awful symptoms. People have passed out absolutely cold and go into what appears to be a deep faint. And only a doctor can tell whether it's a state of shock or not.

Teiser: What was your position on those trips?

Adams: I was after 1930 the assistant manager. I went first in 1923 for a week, and then didn't go again until 1927. And 1927 I was the photographer, and I was taken along to make pictures. That was in the Sequoia National Park area, the High Sierra back country. In 1928 we went to Canada. I was the photographer and helped, and Mr. Colby was the leader. In 1929 I didn't go anywhere. They went to Yellowstone, I think. In 1930 I was back assisting Clair Tappaan as manager. I was in charge of personnel, mountain climbing, and lost and found, and morals committee. [Laughter]

So, that was my job, and it really was something, because I'd be up very early in the morning, and I'd try to make some photographs, and I'd have to see that people got off and their bags were ready to pack. Then I would have to go ahead, at a rather fast rate, to pick out the campsites and the commissary location and the latrines. And I'd always divide up the camps--men, women, married couples--try to figure it out logically. I'd get that done. Then I'd go off and try to make some photographs. Of course, I did many on the trail, too. Then in the evening I had to conduct the campfire and run the lost and found. And of course the lost and found could be serious, because somebody would leave something like his watch or a pill--you know, you don't have much of un-importance when you're out in the wilderness. We'd have a bag, and some of the things we'd find in it were surprising! Glasses, prescription bottle, a toothbrush, etc., etc.

I can report now that the worst hike I ever had was when we left Woods Creek and went to Rae Lake. We were going to camp at Rae Lake and go over Glen Pass to Center Basin the next day. I had a very nice Dagor lens. It was what we call a convertible--symmetrical lens. In other words, you could unscrew the front element or the back element and get one and a half or twice the size of the full-lens image. It was really three lenses in one. I'd taken a picture in Woods Creek Camp, leaving camp in the morning in the usual hurry. When I got to Rae Lake, I realized

Adams: I'd left the back of the lens on a rock at Woods Creek, and I could see in my mind's eye just where that lens was. Of course animals could have nudged it off or got it--but my whole photography depended on this lens (it was the only one I had on the trip). So after dinner I said I had to go back the twelve miles. So I hiked down there as fast as I could, with a flashlight, and by gosh, there was the rock and there was the lens. And I ate some hardtack and a piece of chocolate, and I came back the twelve miles to Rae Lake. That made it thirty-six miles for that day.

But I got back in the morning after the camp was broken up--gone. So I had this climb of nearly twelve thousand feet over Glen Pass to Center Basin, which was about fourteen miles down. So I had walked a total of about fifty miles!

And all I can say is I'm glad they didn't move camp the next day. But those were the days when I could do such things. I could have done another ten miles. I was just terribly tired and footsore. But I used to time myself walking. Even with a pack, on the level I could go almost five miles an hour. Usually on a long trip, I used to keep to about four. Mr. Colby had a wonderful system of starting in the morning at a very slow pace, and the people with him would get exasperated because old Will would plod along. Then he'd get plodding a little faster, you see. And he'd never stop; he'd just go all day long. And all the guys would be dashing ahead--the young squirts, you know, racing for the next camp. And we'd pass them lying down on the ground, gasping. And Colby, at sixty-something, was still plodding along, with a nice, good-sized pack. [Laughter] It's a matter of just accommodating and working into a pattern.

Yosemite, Continued

Adams: Well, I think now we've skipped away from Yosemite. Now, the early days in Yosemite are associated for me with the LeConte Memorial. They had just moved it from the Camp Curry area. It used to be called the Lodge. Lodge was the wrong description. I mean nobody ever slept in it. Well, they did, but it wasn't supposed to be for that purpose. It was first in the Camp Curry area, and when they expanded Curry they found that this building would be right in the middle of it. So they offered to rebuild the Memorial for the Sierra Club in a near location to the west.

Mr. Colby and a few others came up and picked the site, where it is now, where you got a beautiful view up to Tenaya Canyon. The trees in front were ten to fifteen feet high. They were young

Adams: cedars and pines. You'd look over this very small growth and see the whole vista of Washington Column, Tenaya Canyon and Half Dome. It was a grand view.

Now the trees are nearly a hundred feet high, and you can't see anything at all. It just shows how things grow and change in time. They always had a "custodian." There were a few dried plants and a few books and information available.

Teiser : How old were you when you became custodian?

Adams: I'm always two years behind the century. That would be 1919 when I was at the Lodge alone. I'd take people out on trips.

Teiser: That was a lot of responsibility for a young man.

Adams: Yes, that's true. Then, after that, Aunt Beth and Uncle Frank joined me. I climbed around a lot.

Teiser: Did you always carry cameras with you?

Adams: Oh, almost all of my trips. Usually a 6 1/2 by 8 1/2 or a four by five--fairly simple. But my pack would be about fifty pounds. I also carried my tripod, and a good tripod weighs about ten pounds. And then there were the lenses and the film holders and the accessories, and lunch. A notebook and maybe a brass cylinder for a mountain-top register, the Sierra Club register.

I remember bringing down the early records of Clarence King from Mount Clark after putting up a new register. And somebody stole that record that was priceless; the first notes of King. I had them at the LeConte Lodge in an envelope, clearly indicating that they were important records, and I was going to send them to San Francisco. And one day I found they were gone!

[End Tape 9, Side 2]

[Begin Tape 10, Side 1]

Adams: Well, to go back to the Clarence King episode. Mount Clark used to be called Gothic Peak, which is a better name for it. It's a triple glacial cirque. It's unique, and a very handsome mountain. Clarence King's description of his ascent of Mount Clark is very harrowing. Nobody'd been able to find the place he made his famous "jump." I went all over the summit area, hanging down on ropes and trying to find the place. We say now there was probably a rock slide that's obliterated it. But everybody in those days could really exaggerate their experiences. The painters did and the writers did and the explorers did; it was always a great wild wilderness--hard to check up on!

Adams: The place that he described, in considerable detail, where he makes his "leap over the abyss"--it might have been big enough to kill him if he fell. I mean, you don't have to fall very far on granite. Well anyway, up at the top he had left this lead container--in pretty bad shape--and in that were his original geologic survey records with the altitude readings, his signature, and date, time of day--all such stuff. And then some other climbers left some notes after that. I replaced those with the new Sierra Club register, which was a brass tube with a sealed wing lock cap on it. In the scroll was the name of who placed it there, the date, the time, notes of any predecessors, etc., and then people sign it to record their climbs. I guess that's still up there, although I suppose vandals might have taken it!

The register really has value only on a very remote, difficult mountain. I imagine Mount Clark has been climbed hundreds of times. But at that time, in the 1920s, relatively few people had made the ascent.

The idea of true wilderness today is inconceivable. When you were out there in the earlier days, you were completely out of touch. Now you have search planes, radios, and helicopters.

Teiser: Those records were never returned?

Adams: No. Somebody who knew something about them took them, I'm sure. I recognized how valuable they were; valuable in a mountaineering-historical sense.

Then Hall McAllister gave the cableway on Half Dome. The cableway was two posts set in the rock about every fifteen feet with steel cables threaded through them. You just walked up between the cables. I attached the Crosby clamps to the first cables.

Photography Workshops and Aspiring Amateurs

Teiser: We wanted to ask you to discuss your workshops.

Adams: One of the most important things about a workshop, apart from its location, is the fact that in my philosophy it is directed to the individual photographer maintaining his individuality. Trying to find out what he has to say about what he sees, so that he is not dominated by any school or any instructor or any philosophy.

I think I described to you that in studying music, all my really effective teachers never played a note for me. And there was only this one teacher in Berkeley who taught with two pianos,

Adams: and by illustrating phrases and saying, "No, it's this way," and me echoing her. In a few weeks my father recognized the difference. He said, "It doesn't sound like you." Now, that was a great revelation. You suddenly realize that you must build something of yourself. Then you can resist somebody coming along and saying, "Now, this is the way you do it." Technically it may be another thing; you may have to say: this is the way you expose and develop to get a certain result. But the result is yours.

When it comes to saying, "You have to make a photograph with this feeling," or we have to phrase something in music with a particular style, that can be quite disastrous unless a person is a strong individualist. And part of the success of the whole "group" piano teachers, music teachers, was really developing people on an imitative basis. I suppose they were honest about it, with the hope that they'd develop the individuality later. But there's something about the individual's development of style and phrasing and touch that's so precious. You just can't dominate it, you see. So I was extremely fortunate in the opportunity to be myself.

And that's why I want to impart that same concept in photography. I want to give students a basic technique which will liberate them to the utmost degree to get what they "see," and get what they want. What they see and what they want to photograph and what they want the photograph to look like--that's their business. But knowing something of the scientific, practical, technically oriented approach will enhance their capacity to understand and express themselves.

Teiser: It must be difficult, when a group of students comes in, like the other Sunday, and you really didn't know them.

Adams: Well, they were pretty bad. That was a very weak group.

Teiser: But you didn't even know if the one who had what he presented as beautiful sunsets really liked to photograph those. His objectives had not narrowed down; you couldn't even perceive what he was trying to do.

Adams: You can't do that. You either have to say, "I'm a psychiatrist, and you'll come to my couch for so many dollars an hour over a period of six months," or you admit, frankly, just an intuitive reaction. And I usually tell them that.

I had a man here the other day who was an engineer and wanted to get into photography. And, oh boy, he'd really worked out a lot of good mechanics. But he absolutely didn't have any "eye." All I could do was to say, "Look, you're seeing all this stuff.

Adams: It's like carrying rocks in a knapsack. You don't have to." There was all this dead space. Then you bring the "L" cards in and you show him how, when you bring a piece of grass in the image up to the edge, the grass suddenly becomes significant in relation to the whole thing. He says, "I never saw that. I never thought of that." I say, "You have to look for it. I mean, that's part of seeing and feeling." It's a very subtle and very complicated thing!

Teiser: Do you sometimes discourage people who you think really would be hopeless?

Adams: Oh yes. I don't try to tell them they're no good and bums and everything. Well, I just say to them, "You have a long ways to go. And you haven't got your techniques, and you're really not expressing anything. And you just better either get off the dime and do something--" Sometimes it's that. But most of the time it's some very gifted person who thinks he wants to go into photography, and then you try to pick out for him all of the pitfalls of the so-called professional world.

You may work five days a week in a professional studio and get fed up with the most commonplace, dull assignments. At the end of that week, believe me, you'd rather go bowling than work further with the camera. You'd be tired. Whereas, if you're a lawyer or an engineer or a bootblack or anything, you build up this creative tension. Many of the great photographers in the world have been amateurs.

I try to point out how difficult it is to break into photography. "Well," they say, "but you sell prints."

"Yes," I say, "I've been doing it for forty years."

There's a little difference. I mean, I sell a great many prints. But twenty-five years ago I didn't sell a great many prints. I was scratching pretty hard. I say, "You just can't go out and sell prints. You could get an agent. You could get a publicity man. You might suddenly emerge as a shooting star and it would be wonderful, but the chances are against that." But the people that you see that you instinctively know have absolutely no taste, no knowledge, no perception, sensitivity--they might be fine people and really good in many other ways, but not in photography.

Just like music. You've heard people play the piano and you wish to gosh they'd go and start fishing or something. Yet they may be playing accurately, but their whole tone construction, their whole pattern of phrasing and shaping, is all off, and it's an agonizing thing to hear. [Interruption]

Joseph N. LeConte in the Sierra

Adams: Up in Yosemite in the earlier days, I was not conscious of being a photographer at all. I was just making photographs. But the difference between someone like LeConte and myself was that I was expressing my feelings. And while he had very intense feelings about the mountains--he really loved them--he was content to express the factual, scientific, topographic features. I mean, as a scientist. These things are fully documented in his photographs.

But photography, being a language, admits poetry. There's no good grounds of comparison there; both are separate and important.

Teiser: There were two or three years when you went on trips with the LeConte family; was he an accomplished mountaineer?

Adams: Oh yes, in relation to the period. He was a climber, but he never took chances. He wasn't a rock climber. They didn't exist then.

We made many ascents. We climbed the Agassiz Needle, we climbed the Goat Mountain--lots of peaks that are commonplace climbing now, but we did them with excitement then. He was the one that explored the Kings River Sierra. It seemed that quite a number of years ago, the State employed a topographer--I forget what you'd call them--a cartographer--a surveyor, I guess, to prepare a map of the southern Sierra Nevada. It was about 1880, I think. And this man got to the top of the Granite Divide and took one look north into the middle fork of the Kings and beyond, and just started sketching in. And the maps were quite wrong. The shepherders and the cattlemen knew this didn't jibe with anything they had experienced.

So, LeConte and his friends who loved mountains went up and down what is now the John Muir Trail I don't know how many times. And they had to haul animals over cliffs with block and tackle. People like the Duncan McDuffies, the Charlie Nobles (the mathematics professor)--really a very elite group of people. Theodore Solomons was sort of a "parallel" figure, but not one of the group.

So LeConte decided he was really going to map this region properly. And of course, being a scientist-surveyor, he had all the techniques. So he produced the first functioning maps, which were not really accurate, as he said--they might be off a half a mile. But at least we know the North Fork of the Kings exists,

Adams: and we know that the Middle Fork of the Kings goes all the way up LeConte Canyon to Mount Goddard, and Goddard Creek doesn't flow north and so on. All kinds of terrible mistakes were made on those earlier maps.

So he drew up the whole complex of the Kings-Kern region, triangulated it, and did what remains an extremely creditable job, although with no presumption of being really accurate, because he didn't have the equipment. But he was within, I would say, half a mile; that's what people who know told me. His maps were very rewarding and useful.

I don't think his wife, Helen Gompertz, went on too many of those big trips. I think they were married after most of them. But they went to Yosemite. And of course the senior LeConte [Joseph LeConte] was with them in 1901, and he died there. The LeConte Memorial is dedicated to him.

And then later on, in the late twenties and early thirties, Mrs. [Joseph N.] LeConte wasn't very well, and they would go to Porcupine Flat. It was a place near the Tioga Road, a very delightful campsite, and she'd rest. I remember in 1923 they were at Porcupine Flat, because that's the time of the big Berkeley fire. And I received word of this fire and went to Porcupine Flat to let the LeContes know that the house had been saved but the roof was slightly damaged.

I left the Memorial in Yosemite. In those days, for hikers everything was "shortcuts." I remember climbing right out of Indian Canyon and making a bee-line to Porcupine Flat. I was wearing a straw hat, and I had gone through brush and forest--not paying any attention to the trail. This was almost a straight line. And when I arrived at the camp I had a baby robin in the top of my straw hat! I think a few of the people thought I was nuts and that I had done this on purpose, but I was the most surprised person of all. [Laughter] Mrs. LeConte nourished this bird for two or three weeks, and finally it flew off.* I'd gone through a tree, you see, and knocked the bird out of its nest.

I told them about the fire, and that it was nothing to worry about, but they should know about it. But it was something to worry about. So they debated whether they should go home, and I said, "Well, I didn't think so. The information was that the house was all right. The roof had been burned a little and singed--no damage."

*For another version of this story, see Helen M. LeConte, Reminiscences, op. cit., p. 69.

Adams: They gave me a message to telephone to somebody to go and look at it. This was the house on Hillside Court in Berkeley. So I stayed with them a day or so. They used to climb Mount Hoffman, climb out on the top of Mount Watkins and look down on Yosemite. It was a kind of an intimate life. They'd always give me a little libation before dinner. Really, they were delightfully drinking people. Never too much.

Teiser: This was during Prohibition--

Adams: Oh yes--

Teiser: Did they make their own wine?

Adams: Oh no, they just had bottles of booze, like everybody else did. (The whole thing was a farce.) It was usually bourbon. And we'd all get together before the campfire in the evening, before dinner, and they'd give these toasts--these little Scotch or Southern toasts. You know, like, "Here's tae [sic] us. Wha's like us? Dahmn few. Thank God." (I can't pronounce it.) These toasts would go back and forth. [Laughter] And the other one is, "I lifts my glass. I has your eye. I winks accordin'. I likewise bows." [Laughter]

And they'd always have this ceremony. And they'd have guests all the time, and they'd have these wonderful campfire dinners together. It was a really great experience!

And Joe always had the camera and was always making records. And of course he just exposed and developed empirically. You do the best you can under the circumstances. I later made albums of prints for the Sierra Club of his Hetch-Hetchy pictures, and while they don't say much emotionally, they are simply an amazing survey of this country in the 1890s and early 1900s. And now that there's seventy years in perspective, this documentation becomes terribly important, you see. The forest people can look at them and see the disposition of trees and meadows in early days.

You see, very few people realize that Yosemite meadows are not natural grass; they imported grass for cattle feed. Because when people like the [John] Degnans were there in the seventies or eighties, I think--Virginia can check the date--they raised cattle for their milk. And they imported this very special grass. It was ordinary feed grass, but the grass you see in the meadows now has nothing to do with what was there first. The Kings Canyon has bunch grass, which is a quite different thing and very nourishing for donkeys, but it's not good for cows.

Adams: Well, to get back to Yosemite--the awful condition of the concessions that were there--there were always conflicts. The Camp Curry people and the Desmond Park [Service] Company and somebody else's hotel and [A.C.] Pillsbury's studio and [David J.] Foley's studio and [Julius] Boysen's studio and Best's studio. Everybody just scratching for a living, you know. [Interruption]

Some of the early Yosemite people were remarkable. [Gabriel] Sovulewski; you met Grace Ewing [Mrs. Frank B. Ewing], his daughter. He was a man who was very prominent in the building of the trails. He did very fine trail engineering, because some of the routing and structure of those trails today are perfect. Some have just been straightened.

The Half Dome Cable

Adams: McAllister gave the cable up Half Dome, and asked me if I would put on the Crosby clamps. Now, a Crosby clamp is a U-shaped device which secures the cable from slipping through the post rings. Well, they weigh about five pounds apiece.

So the government brought in at least two mule-loads of Crosby clamps and dumped them at the spring at the base of Half Dome, about a half a mile away, and left me a couple of monkey wrenches and a safety belt and said, "Good luck to you." [Laughter]

Well, you know, I had no idea of the weight. Here I have this pile of metal, and I have to think, "Do I start the clamps at the top or bottom?" Well, I started them at the top, logically, because we have to "break in" on a job like this. So I took about ten clamps--fifty or sixty pounds in my knapsack--and went up these cables, which weren't really rightly set. I first had to climb up to what they call the "neck" of the "Elephant," several hundred feet of trail to the base of the Dome. Then I had to go up the seven hundred feet to the top and attach the clamps as I came down. Let's see, there'd be one, two, three, four, five, six, seven, eight, nine, ten--there'd be five pairs of posts, and I could do them in one trip. And I had to work at 45°, but I had a belt. They were very thoughtful for that, but the hook was wrong. If I had fallen, it might have pulled off. But I was supposed to clamp that into the post while I set these clamps on and put the bolts together.

Let's see. That took me six days of dawn-to-dusk work. And finally I got all the clamps on. I did this in the last part of April and early May. So it served its purpose all summer. But they had to be taken down every winter. They left the cables on the Dome. If the posts were strong enough and were shaped a different way, I think they could have left them up without damage from snow. But I'm not an engineer, so I don't know.

Adams: Hence I have been up Half Dome probably more than anybody I can think of. [Laughter]

In the first days, [George C.] Anderson climbed Half Dome drilling holes in the rock and inserting little expansion bolts. And the rope laid right on the surface of the Dome. It was quite a hazardous climb because the Dome was an exfoliated mass. Contrary to Muir, the glaciers never came to within seven hundred feet of the top of it. But these great plates of granite overlap on the downward side, so you come across about a two-foot height of granite ledge. Well, when you're climbing at 45° a two-foot step or a thirty-inch step is really a pretty hazardous obstruction, especially when you're going down. So today we can climb the Dome safely, but a lot of climbers ascend the Dome outside the cable but only with ropes and the most careful "friction" climbing.

But now they have cables with smaller clamps and a little different system. They still take them down. But it wasn't the cumbersome thing I had to work with.

But that was an interesting experience. There was a sleet storm once, when everything was covered with ice. I didn't have any gloves and, oh gosh, it was terrible. [Laughs] Especially me, as a pianist, getting my fingers frozen.

So, that was a very nice experience.

When the LeContes were in Yosemite, we explored the Quarter Domes which are in between Half Dome and Clouds Rest--actually between Half Dome and the Pinnacles. And on one of the Quarter Domes is an enormous erratic boulder, one of the best examples I know of. I have a picture somewhere of Joe LeConte standing by this boulder. LeConte was a tiny man (he was about five feet one) and this boulder looks gigantic. We agreed that he should always be around to be photographed in scenes of nature, because he made nature look so much bigger. [Laughter]

Then I met Virginia. I used to go down to Best's studio, and Harry Best had an old Chickering square. And I used to practice. And of course the inevitable happened, but it was a very long engagement. She had tremendous patience.

I would walk down from LeConte Memorial; it was about a mile. Didn't think anything at all of the fact that we had no car. I did have a car, a little old Ford laundry wagon. But I didn't have any lights, so at night I had to walk down to the studio and practice two or three hours.

Teiser: You were practicing and taking care of the lodge and photographing all the time?

Adams: Oh yes. You see, I also was studying harmony and musicology that I had to work on. So I was pretty busy.

Teiser: You certainly were.

Adams: On a nonacademic basis, but still...

Logic and Faith

Teiser: I'm amazed that you were such a responsible young man. You apparently did everything you said you were going to do.

Adams: Yes, I did--tried, at least. I guess I was pretty good. My father was a pretty good logician. I mean, he would say: if you have to do it, you do it, and do it the best you can. That's all there is to it. But I also was required to do a lot of literary work. And a lot of writing.

Teiser: I wonder if your first published piece isn't a report in the Sierra Club Bulletin of 1921, as custodian of the LeConte Lodge. It was a report for 1920.

Adams: Yes, it probably is.

Teiser: About needed repairs. A short report.

Adams: Yes. I have completely forgotten it, but that probably would be it. I think I told you the experience when I was studying Greek with old Dr. Harriot in San Francisco. Did I tell you that? Was that on the tape?

Teiser: Yes.

Adams: Yes. Dr. Harriot was a fundamentalist. He was a Canadian. He was apparently a very fine Greek scholar--there was no question about that. He really was an awfully good teacher, I must say that for him. I read quite a little of the classic Greek and got a lot out of it.

But he asked me one time, he asked, "What are you doing? What are you reading? Do you go to church?" I said, "No."

"Oh, my God. You don't go to church!" I don't think he said "my God," but he indicated it was terrible.

He asked, "What's your religion?" I said, "I guess it's Episcopal. I don't know."

Adams: Well, that goggle-eyed him. And then he asked, "What are you reading?" I said, "Poets. Of course I like the Romantic poets," and included Shelley.

"Oh, Shelley! Evil!" He blew his top. Dr. Harriot said, "I suppose, young man, that you are one of those believers in Darwin."

I said, "Yes, it makes a lot of sense."

He said, "Well, evolution is a very false thing, as the Scriptures clearly show you. It's a matter of devolution."

I said, "What do you mean?"

He said, "Well, the world was created by God in 4004 B.C. And we know that. That's been proven by--" (I forget the name.)* And he said, "Ever since then, man has been de-volving instead of evolving, and will until the Second Coming will come and will clear it all up." Those were about the exact words.

I said, "Well, Dr. Harriot, how do you account for the fossils in the rocks? I mean, geological history--"

"Oh," he said, "that's a lot of nonsense. My dear young man, God put the fossils in the rocks to tempt our faith." [Laughter]

Well, that got my innate scientific mind, or tendency, really mad! I remember telling my father about it.

"Well," he said, "if Dr. Harriot can multiply a time factor by maybe a million. The fossils, you know, are there like we are, and tempting what fate?" He couldn't quite blast the old man--Papa was very kind. But looking back at it, it's absolutely curious that people have that degree of logic in modern times!

This image I had of God was of a bearded man in a white robe with a knapsack full of fossils, poking them in the rocks to tempt the faith of some serfs that would follow. So I think from that time on I was really soured on conventional religion, because felt it was pretty bad and weak.

Teiser: Well, you were ready to be a pantheist, I suppose.

Adams: Yes, I guess I was, but I never got to the point of the pathetic fallacy. And that's interesting that I didn't, because I very easily could have. And a lot of people today, in this super-conservation time, with movements and ideologies, approach pantheism more than I ever did. That is, imputing individualistic qualities to natural things. Who called it the pathetic fallacy? I can't remember the--wasn't it Wordsworth?

*Bishop Ussher.

Teiser: It may have been Wordsworth.

Adams: Wordsworth was kind of a highly expressive John Muir. Well, I'll try to find out, because it really is an important element of philosophy.

Teiser: Well, maybe it was Ruskin.

Adams: I think maybe you're right. I think maybe it is Ruskin. Let's look it up. [It was!] It means we attribute human qualities to the inanimate or to the nonhuman.

Of course, remember, being born in San Francisco, being part of the Golden Gate and the West and the Sierra Nevada, I have a totally different concept of the world from the people born in the Midwest and the East.

Although the early paintings of the Hudson River School are really quite remarkable. There are some beautiful places, but they're all on relatively small scale. You never have this overpowering impact of the West--but you have more thunderstorms, which make up for it!

Panchromatic Plates

Teiser: Were you aware of Carleton E. Watkins's photographs?

Adams: No. I'm very glad you brought that up, because I didn't know about Watkins for decades. I saw a lot of old photographs and they didn't mean anything to me. I'd see some and I'd say, "Oh, they're terrible." The only thrill I got in that domain was when I went in to see old A.C. Pillsbury--and he was a rather remarkable man. He did the first time-lapse movies of flowers opening. Great man. He'd received some Wrattan & Wainright glass plates from England. And they were panchromatic, and he used a red filter, and he showed these pictures, and you never saw such glorious clouds and dark skies, and oh gosh, it was just something!

Well then, the story should revert a little to a bit of photographic history which is not very much known. George Eastman had a terrific industry by the tail, and realizing that this thing was just getting beyond him and beyond anybody on his staff, and knowing that he had to have photo-scientists, he 'd heard that Dr. C.E.K. Mees was the really top photographic scientist going. There was somebody in Germany, but George didn't like the Germans, and he went to England. And he saw Mees and said, "I want you to work for

Adams: me." He offered him a salary--very much more than Mees could even dream of getting in England, and Mees said, "I'm under contract to Wrattan & Wainright for ten years; I can't accept it." What did Eastman do? He bought out Wrattan & Wainright [laughter]--to get Mees.

So that was why you had for a while Kodak-Wrattan plates. My "Monolith, the Face of Half Dome" is made on one, incidentally. And the Wrattan filters, which still persist today are the world standard of color filters. They're now all in gelatins, but they can be made up in glass.

Mees was imported to Kodak in Rochester and became the director of research. And Eastman was a very strange man--a bachelor--had a great Momma complex. He was not a very easily understood person, but completely honorable. Many great stories were told me by Mees. I used to see Mees often after he'd retired to Honolulu. I'd go to his home every other day or so while I was there, and we'd sit down and have a drink by the sea and talk, and he'd reminisce. Loved to see me, because it was a way of blowing off steam. Boy, the stuff I got from him! If I'd had a tape recorder, it would be invaluable! I mean the early part of Kodak, and the struggles, and what was quality, and why they didn't take up the Land projects. You see, Land had an option of a hundred or two hundred thousand dollars with Kodak to buy his project. They were just beginning. And "Nobby" [Walter] Clark said, "Oh, it's just a toy. We can't do it."

Mees said, "I was inclined to favor us getting it, but of course, we couldn't have brought it out until it had been perfected. A young company could bring out something that isn't perfect, but an established company cannot do that."

Well, of course Polaroid is second to Kodak now, thank God [laughter], for that very reason, and has achieved perfection.

Mees told me this wonderful story of advertising. "I was at my desk early one morning and a man comes down and gives me a message. 'Mr. Eastman wishes to see you immediately, without delay.'" And Mees thought, "What have I done now?" He'd never got a message like this before! "So I went up to the office." [Imitates Eastman--hearty tone:] "Come in, Mees. Sit down." And he pulled out an advertisement that had been in the morning paper: 'Kodak makes the best lenses in the world.' And he says, "Mees, is that true?" And Mees said (he had a couple of fast thoughts, you see), "Well, I'm a scientist. I can't do any sales or advertising." He said, "No, Mr. Eastman. It isn't true. The Dahlmeyer, Zeiss, and Cooke and a few others make, really, better lenses than we do." [Imitating Eastman:] "That's what I thought. I know we're trying. Thank you very much."

Adams: From that time on, every advertisement that came over the desk of George Eastman had to be checked by Mees and one or another person for accuracy and honesty.

And that's one of the best things I heard about Eastman. He was that kind of a person.

I must say that of all the material I use, Eastman Kodak's the most consistent. They're the least imaginative company, the least innovative in one sense--the aesthetic sense. But they're really a pretty fantastic outfit.

Teiser: You said that Pillsbury showed you a Wrattan & Wainright plate?

Adams: Yes. Wrattan and Wainright were the big English firm that made plates and filters, maybe papers.

Teiser: Were they new?

Adams: Oh yes. He got some of the first ones. And then I got a box when they came on the market. I got two boxes, in fact. I guess I had three, all together. And that's what I did the Monolith and other early pictures with. Then Kodak made them, and they were called Wrattan plates.

Teiser: Were they very much better than the material you'd been getting?

Adams: Well, there was nothing like them that I knew of. They were the first panchromatic emulsions of any consequence.

Then of course they moved on to panchromatic film--which is today the principal emulsion. Basically, a photographic emulsion is only sensitive to blue light. Plain silver halides react only to blue light. Now you bring in a dye which is sensitive to or absorbs the energy of green light and transfers that energy, as quantum energy, to the silver. That means the emulsion is sensitive to green as well as blue. Then you bring in the dyes that absorb red and green light, and you have panchromatic emulsion.

They had three types of panchromatic--A, B, and C. A is only partially panchromatic. A is red-sensitive, but of rather low green sensitivity. Type B, which is the standard film we have today, still has a deficiency in the green. The green part of the spectrum is that area of the spectrum to which the eye responds most. In other words, anything that is green comes through with a higher energy to the eye. So if I see a green fabric or a green tree and I say I want to place that on, say, Zone V of the scale, I really have to place it on VI to get the "visual" effect. That fools a lot of people. That's why you see so many black trees in mountain pictures. They are of low color saturation to begin with, and panchromatic film does further lower the green values.

Adams: The Panchromatic C was super red-sensitive, and therefore it was very fast with tungsten light. (Tungsten light has a greater proportion of red light to it than daylight.) One effect was that it produced white lips. They had to develop two correcting green filters to take care of the type C.

All these things are simple to understand, but very few people know about them at all!

Verichrome pan is a film which is more sensitive to green than the ordinary pan. Therefore, it is recommended for a lot of landscape work. But it never caught on, because people liked to use strong filters and get black skies, whereas in the daguerreotype and wet plate days, you'd only get white skies. You could only use blue light.

I would say you got a greater stylization of values in the early days with emulsions sensitive to blue light only than you do now with panchromatic materials. I can duplicate that effect by using a strong blue filter; it cuts out all the other light.

We have a series of filters that partially withhold light of various colors. And you have filters which are called tri-color-- say, the blue, green, and red, which transmit the respective colors. Then you have the "minus" filters, which are very interesting, such as the minus blue (number twelve) and the minus red and minus green.

Teiser: Does "minus blue" mean it doesn't let any blue through?

Adams: Yes, it completely cuts out the blue. There's more than a hundred Wrattan filters. All of these are tools which the photographer can use.

Teiser: This photograph, "Banner Peak and Thousand Island Lake," I wonder what film you used for it. This is the one that's variously dated 1923 and 1927.

Adams: That's glass plate. That's the same as the Half Dome. I think it was made in 1923 on that trip with Harold Saville. And it was made on a Wrattan plate.

Teiser: Is that why you were able to get such splendid sky?

Adams: Oh yes. Ordinary orthochromatic (green-sensitive) plates couldn't do that. The sky--you'd get the clouds and you'd get the clarity, but you wouldn't get that level of richness. Strange things happen when the sky drops in value below the clouds (because, you see, the sky, say at that angle, would be around four hundred candles per square foot, between three and four hundred), and the clouds would be around eight hundred and a thousand. You'd have only a one to two or a one to three ratio. And that isn't enough to be dramatic.

Adams: Now, with orthochromatic film, you could lower the sky value a lot. I mean, I get a K2 or G filter. But you couldn't lower the sky value as much as you could with a panchromatic plate or film. And that's why in the early days using blue-sensitive plates you couldn't photograph clouds, because the blue sky had the same photometric value as the clouds. So they made separate negatives of clouds.

When they brought it down on the scale, giving one-eighth or one-sixteenth the exposure, the clouds were obviously much brighter than the sky. Then they'd use those cloud negatives and print them in. Sometimes they'd get them upside down. [Laughter] Sometimes they got them with light on the cloud from the right side and the light on the mountain from the left. [More laughter] I'm telling you!

One of the funniest ones was years ago. The prize-winning picture of the Royal Photographic Society in London. It was a picture of the Parthenon, and it was in beautiful late evening light. The white columns glowed in the late sun. And behind was a thunder cloud, you see. A very beautiful picture. Boy, that's something! Then you look at the light on the columns, which is coming from this side, and the light on the clouds, which is coming from that side. [Laughter]

And I have a picture of Half Dome and the moon which is an unintentional phony. This picture of the Dome was taken about two in the afternoon. And I just kept the camera in the same place, and the moon came up after the sun had completely gone. Here's the full moon in the sky--the moon and Half Dome. It's a real moon--not "printed in." I show that to people and I say, "What's wrong with this picture?" They can't figure it out.

V. Adams: The moon would never be that high when the sun is still up?

Adams: If you had a perfect full moon there wouldn't be any sun. Because, it's always at the same angle--opposite the sun. And you only get the full moon when the sun is directly opposite and below the horizon. So here's a full moon in the sky, and the sun was clearly high, which is an absolute impossibility.

V. Adams: I think you took it at four in the afternoon.

Adams: Four, it might have been. Well, now the good one, the vertical one (taken with the Hasselblad), the one I use all the time, that's a real moon in real time! That's about a little over three-quarters. That's taken about three-thirty or four--maybe by daylight savings time, five. And the shadows are falling on the Dome. But the moon is in the right phase for that position of the sun.

Teiser: It's on the cover of this last Infinity, May 1972.

Adams: Yes. Also a special edition print which you've seen around a lot. It's a very impressive picture. It's absolutely real. There's nothing wrong there. That's the moon and the Dome, and they are taken together. But you just can't bring the moon up into the wrong phase, you see. Because anybody who knows the disposition of the heavenly bodies is going to immediately blow their top.
[Laughs]

[End Tape 10, Side 1]

[Begin Tape 10, Side 2]

Dreams and Heavenly Bodies

Adams: As you know, I'm scientifically inclined, and I am not a professional mystic. I cannot categorically deny such things as ESP or thought transference, because I think those are domains we know nothing about. But I can record for you an experience that when I was a young boy in San Francisco, before I ever went to Yosemite, I had an extremely vivid dream of waking up in a big building on a cot. I can still remember the discomfort of the cot. And I looked up to my right and here was a multipaned window--whatever you call these window panes--and the moonlight was coming through, and it gave me the feeling of being in some kind of a stone-cast building. The dream was so extremely vivid that I've never forgotten it. And I've been very sure now to remember that it happened long before I went to Yosemite.

And in 1919 I was sleeping in the LeConte Memorial on a cot, and I woke up and here was the same window, the same moon, the same mood--the stone building--the complete reconstruction, if you want to say it, of this dream, which had made such an impression that I couldn't forget it. And the effect on me was of course a little bit shattering. I remember getting up and turning on the lights and dressing and sitting and wondering what it was all about. Because this was a complete, detailed duplication of the dream.

Whether that is total coincidence or whether it's something else, I don't know, but it's something that's very important. And I just record it with the assumption that it is coincidence and probably emotionally exaggerated and so on. But it is something that for me was a real occurrence.

And of course I do have these dreams recurrently, every six months or so, of getting in a taxi and driving to a music hall or an opera house or a symphony hall, and seeing great placards screaming that Ansel Adams is going to play the Brahms Second Concerto with

Adams: the Boston Symphony. It's all very real. I'm in a terrible state because I don't know the Brahms Second Concerto at all. But I nevertheless am disgorged at the stage entrance and go in. All the musicians are there backstage, tuning up and talking, and the conductor comes forward and says, "I'm so glad to see you. Our rehearsal was encouraging." And I sit there, and a slight feeling of perspiration--"What am I doing here?" I take a glimpse, and the hall is completely packed with hundreds or thousands of people. Finally the conductor invites the orchestra to go out on the stage, and they go out and take their places. And I'm supposed to lead, so I walk out and the conductor follows me, and I get as far as the piano. And the conductor bows and we all bow, and he steps to the podium.

And at that time I wake up from the situation with the screaming heeby-jeebies because I don't know the work, I don't know anything about it, even the first notes! I'm absolutely incapable of doing it.

I've sometimes gotten further when it's been really a very traumatic business. And sometimes I just barely get out to the piano. But with the idea of not knowing anything about the music but being fully billed for it, advertised, announced. It is a scary situation. The orchestra's good. And in some strange way, I have had a rehearsal of which I remember nothing. And I keep getting this dream over and over again. I must have had it a dozen times.

It's a very interesting frustration dream. I've had the same thing in climbing--of climbing on an icy mountain; everything is fine--and then I find myself stuck, and I don't know where to go. I suppose that's motivated a little bit by Muir's description of Mount Ritter, where he was spread-eagled on the cliff and couldn't see up or down or sideways. Of course, he never should have been there anyway. (I never should have been in many of the places I was really in.) But the instinct takes over and he leaps and grabs a ledge and gets out of his predicament.

Well, I have these dreams--getting into absolutely insoluble problems--and then I wake up. Sometimes you wake up with a sense of relief, and sometimes you wake up, really, with just shock.

Teiser: Ever dream photographs?

Adams: Yes. And I also dream in color, which is very interesting. I'm very conscious of color.

Teiser: There are few people, I think, who do.

Adams: Yes, I think so. I do dream in color. Things are seen in colors. So I can say that, truthfully.

Adams: But this other one is such an interesting experience--in Yosemite in the LeConte Memorial. My father always recounted of having a dream--he's sleeping out somewhere and he sees a star, and the star begins to move toward him and becomes brighter and brighter and brighter. And finally he wakes up.

And I had one experience--I was up, I guess, way up in Tuolumne Meadow somewhere, where I saw a meteorite coming directly at me, the first time I've ever seen that. The angle of approach of the meteorite was right directly toward me, so that the object became brighter and brighter and brighter and suddenly extinguished. It was quite an experience. And of course I thought of my father's dream. He might have seen something.

And then lately, in late years, we've gone to the high country, and we see satellites. I remember seeing the first Sputnik from the top of the Polaroid building in Boston. It was going south across the sky. And many scientists were up there, and they were looking at this with extraordinary interest! Some of us were just thinking, "What a wonderful thing," and others were very glum: "They got there first," they said. This little thing was traveling fast, and it took quite a time to get down to the horizon. It had a strange, illusionary flat trajectory, and it suddenly winked out when it got in the earth's shadow.

I had a very interesting psychological experience in San Francisco. I walked out of the house one night, going to my darkroom, which was next door. And I looked up at the sky--just looked up--a glance. (I always do, for some reason.) And then after a few seconds I thought, "What is this?" My unconscious said, "There's something going on." I looked up again and here was a satellite moving. Now, the interesting thing was that I looked up just as a glance, and yet my mental computers were able to tell me that there was something moving among the stars.

The mind is so complex--what goes on is so remarkable--such as the speed with which things are observed and computed. I just took a quick glance at the sky, and then it took ten seconds or more for my mind to tell me that there was something different up there.

Teiser: Your visual computers must be faster than most people's.

Adams: I don't know. They're probably more directed in some ways. They're probably not any faster.

Concepts of Conservation and Wilderness

Teiser: I'll just ask you one question more about Yosemite. Did you think in the early days, "This is a place to be preserved"?

Adams: Oh yes. But it was vaguely formed in my mind at that time. The question of preservation--the whole conservation picture was confused in the early days. It still is!! The Sierra Club, with their outings, was trying to get people into the mountains to see them so that they would support legislation for their protection. I used to get a more interesting reaction going to Forest Service country, like the mining country at the Minarets, because of the evidence of human content. I think we always felt the wilderness had to be preserved, but we had a very hazy idea what preservation really meant. And we thought nothing of putting our donkey in a meadow to pasture, and nothing of having camped at a riverbank.

Mr. Holman had some pretty advanced ideas. And in fact, he was the one who promoted the idea of fire being an important element in continuing the character of the forest. Then later on, people came and talked about the fact that wilderness is an illusion--"What do you call wilderness?" If nobody'd been there ever, maybe that's wilderness. But Yosemite was populated first with Indians, then with sheepherders and cattle people. So, I always say wilderness is a mystique. It's a state of mind, which we enjoy, in its so-called pristine quality, because we have our wonderful equipment--the best boots in the world, the best clothing, condensed food--all kinds of things. It's like a man going to the moon and being completely equipped with life-supporting units. We do the same thing in a way in the wilderness.

I think if people in the club today went out and lived the way Mr. Holman and I did in the twenties, they couldn't take it. We had mush, bacon, egg powder, flour, salt, some pepper, beans, period. You know, all cooked up over an open fire in tin cans. And my digestion could take it! I used to eat the most colossal quantities of mush, my God! Quarts! Just couldn't fill up. Weighed 120.
[Laughter]

Teiser: Any corn meal?

Adams: Well, sometimes corn meal, but that had its difficulties. We usually had oats--Quaker oats--and that was before the quick cooking kind too, and at a high altitudde you have to cook and cook. Oh, we had some rice; then we had tomato sauce. We had a lot of simple things--and we had honey. And then of course there was the eternal biscuit and flapjack situation. The diet was very monotonous.

Yosemite Concessions

Adams: I think--well, there's so much more to say there. I think the conflict of the early concessions in Yosemite is important. They were all bad. Nobody had any feeling for the place at all. Well, I think Virginia had a real reaction. Grace Ewing had. But people who came in the main were a very low order of people as a rule. The whole place was a big curio, and people as well as the operators had no understanding and no respect. They sold these horrible curios and pandered to the worst possible level of taste you can imagine. A lot of the people got together and petitioned the government to build a road up by Vernal and Nevada Falls so the public could "see" it. Well, naturally it would ruin the place! I remember arguing that; they laughed me down. "Well, if you had to do business here, you'd want more people, wouldn't you?" Which is unfortunately the concessioner's idea. Not really in Yosemite now.

But after the formation of the big company [Yosemite Park and Curry Company] they've always given good service.

In many ways, when you compare it to all the other parks, there's nothing anywhere as good. After all, you ask somebody to come in and run a business--accommodations and food--and hopefully make a little profit; it can't be done on an entirely idealistic basis. You have to have all kinds of little things to sell and "entertainment" to offer.

Teiser: Should the government be running the concessions?

Adams: The government should own all the plants and lease the operations. But you see, when [Stephen T.] Mather took over the directorship of the Park Service under President Wilson--remember, it was a Democratic administration, and Mather was a very prominent Republican businessman (head of the Borax Company of America) but very idealistic. He felt that everything could be operated on Republican principles, and that private business should be invited into the park to operate under government supervision. But there wasn't any subsidy--it was just taken for granted that it would be automatically profit-making. But what happened was that people did invest money, but they didn't earn anything. In other words, they had no property; they just had leases for the land. You could build a building on it, but it belonged to the government. You have only a sort of prior right to it, and you have to maintain it. The whole thing is subject to review now, and it's a very important thing. The government should take over the capital investment, and then lease operation on a percentage basis under the most strict controls. But who's going to define the "strict control"? Who's going to write the taste pattern? That's a terribly difficult thing.

Adams: So we have the eternal flux of enterprise, idealism, profit, loss, and tolerance. [Laughter]

Well, I'll see you again next weekend?

[End Tape 10, Side 2]

Sierra Club Photographers

[Interview IX -- 2 June 1972]

[Begin Tape 11, Side 1]

Teiser: In 1923 you made an album of forty-five exhibit photographs for the Sierra Club. What were they?

Adams: I went along for several years on the outings as the photographer, as well as assistant manager, and I made countless pictures which were available to the members at very low cost. We would get these random orders one year, and I decided the next year I would take this number of prints that I thought were good and do it all up as a portfolio. It was very cheap, and they weren't very good prints. They were as good as I could make them then. I wasn't planning to cut corners, but it was just a selection of pictures on the trip; a group of us got together and picked out which we thought were the best ones. It was a personal club thing.

It's like, way back in 1925-1926, the LeConte family and I, we met a big pack train with a lot of rich New York bankers--terribly important people financially, and they had about six mules per person. They were so anxious--Herbert Wykoff, a lawyer, had told them about me, and they ordered several sets of pictures. I remember, I got the largest fee I ever received from anybody, which was \$750. It probably cost me \$710 to do it. [Laughs] These sets were made for these five men; just a private order.
[Interruption]

Teiser: Were you the first official photographer of the Sierra Club? Did they make that title up for you?

Adams: Well, that was an "apocryphal" title. There were photographers that had worked for years with the club. One of them was Rodney Gleason. Then there was Walter Huber. But I have no idea what their status was--whether they went along for a free trip, or whether they just photographed for pleasure. LeConte and Huber and Theodore Solomons, all those people made photographs on an amateur basis and never made anything out of it, and that's why I, when I did my set, I did it practically at cost basis, because it was considered improper to make money out of the club if you weren't a professional.

Adams: Then Cedric Wright followed me in that position. Got the free outing for being both sanitary engineer and the photographer. He made some very fine photographs, and he sold them. But at that time he realized that he was a quasi-professional and could make something on it.

Sierra Nevada: The John Muir Trail

Adams: Now, the Sierra Nevada book [Sierra Nevada: The John Muir Trail] was done in '38, I think. In memory of Peter Starr, his father [Walter A. Starr] sponsored it.

Teiser: I see that it was done by the Archetype Press. That was Wilder Bentley, was it?

Adams: Yes, Wilder Bentley in Berkeley. And the engravings were done by the Donnelley Company and tipped in. It's a very, very rare book. We call it the "white elephant." There's some very poor pictures in it and some of my best. And the reproductions (letterpress) as a whole are very fine, but the tip-in, especially with calendared or plated paper, is very bad because the corners break. If you have a lithograph or a drawing on a sheet of rag paper, you can bend the corner and it might not break, but the baryta coating on smooth paper will crack. So there have been terrible disasters with the book, where they folded the prints over and they have broken. These reproductions are on a plate paper--very smooth surface--and varnished.

I was talking the other day about the baryta coat, which is a white clay filler which gives extremely smooth paper surface and of course keeps the image away from contact with the paper fibers. You take one of those engravings and bend it--the paper surface plus the varnish or lacquer--you would have a break.

Same thing with the Making a Photograph book, which has tipped-in illustrations, also reproduced by letterpress.

Teiser: That was printed in large quantities, wasn't it?

Adams: Oh yes. It was printed in many editions. But the Sierra Nevada book was printed in only one edition.

Teiser: And a small one at that, wasn't it?

Adams: Yes. I forget how many.

Teiser: Did you initiate the idea, or did Mr. Starr initiate it?

Adams: Mr. Starr said he'd like to do a memorial for his son using photographs, and asked me what did I have to suggest. So I said, "Well, why don't we do the John Muir Trail?" (I had photographed most of the area.) "We can put together something worthwhile."

Teiser: Was his son a mountaineer?

Adams: His son was a mountaineer--a loner, as they call it. He was killed on the Minarets, climbing all alone, which was a very stupid thing to do. I think he was psychologically rather strange in that idea of personal isolation--immolation would be a good word. You can't climb alone in that kind of crags without some day having something happen to you. So he was found near the top of one of the Minarets by Norman Clyde. He was buried there; they just cemented him in on a ledge. The best thing to do.

Teiser: What a wonderful memorial to him.

Adams: Well, his father was a very prominent man--businessman, connected with the Sierra Club, of course, intimately--president and so on. Walter and I had been on trips. He lived to be eighty-seven or something. A very fine person. Of course, he didn't have any idea of books, and he was rather appalled at the cost. And I think we sold the book for fifteen dollars. It says in the colophon in the back that five hundred copies were printed.

When I have done a book, I can remember nothing about it. I can't remember the sequence of pictures--

Teiser: Did you work with Wilder Bentley on it?

Adams: Oh yes, we worked very closely on it.

Teiser: What was he like?

Adams: Very fine man, very capable craftsman.

Teiser: There's an acknowledgement in the book. It says, "For permission to use many of the pictures reproduced in this volume, I am indebted to Alfred Stieglitz, the Studio Publications, the Sierra Club Bulletin, Camera Craft magazine, and many other organizations and individuals." What does that mean?

Adams: The acknowledgements are merely a courtesy to previous use of the pictures. And it really isn't necessary.

Teiser: They didn't have rights?

Adams: They had no legal copyrights. But Stieglitz gave me an exhibit, and the Sierra Club and these people that had used the pictures-- I just wanted to give them credit. These acknowledgements, which, as I said, have no legal obligation, as they would if rights had been secured.

For instance, the pictures in my Portfolios Five and Six are strictly limited and under the control of the Parasol Press. So if the Morgans, who are doing my monograph*, want to reproduce one, they have to get permission of the Parasol Press and pay a use fee. Otherwise I'd be in difficulty, because I'm never supposed to let any of those things out. The Parasol Press bought the entire edition and the rights of use.

The courtesy is sometimes based on economic necessity, but most times it's based on ethical consideration--these people encouraged me and showed my work.

Teiser: These photographs in the Sierra Nevada book had been made, then, over quite a series of years?

Adams: Oh yes.

Teiser: We'd like to have on the record your comments on some of your photographs, and since these are published, so that people could see copies of them, could you just look at the book and discuss them by title?

Adams: Well, the frontispiece, of the mountain climbers, was on the Minarets, and one of those is Dave Brower.

Teiser: Which one?

Adams: I think it's this one [the one at the top].

Then, the "Yosemite Valley" shows many of the very first negatives I made with an eight by ten camera. These negatives are catalogued as I-Y-I et seq. "I" signifies eight by ten, "Y" is Yosemite, and "I" is the serial number. I forget the dates, but most were early, as is the "Bridalveil Fall," which is on a glass plate. And "Half Dome, Yosemite Valley," with a thunder cloud, is again one of my early good ones. I was always a little worried about trimming, cropping it, but it has wonderful variation of "feeling" depending on the cropping.

*Subsequently published. Ansel Adams (Hastings-on-Hudson, New York: Morgan & Morgan, 1972)

Teiser: Is this cropped to your satisfaction?

Adams: No, not entirely.

Teiser: Are these somewhat reduced from negative size?

Adams: Well, it depends: the largest negative size I use is eight by ten. Now, "Vogelsang Peak" was made on a five by seven negative in the late twenties. That's up near Tuolumne Pass.

Teiser: What time of day was that?

Adams: It could be late in the day, very late, perhaps an hour and a half before sunset. "Mount Lyell," with Lyell Canyon and the Tuolumne River, that was done early too, and on an eight by ten negative.

Teiser: By "early" you mean in the twenties?

Adams: Well, around in that area. Maybe early 1930s. The "Grass and Burned Stump," that's on a four by five. And was done near Wawona. "Banner Peak and Thousand Island Lake" is a 6 1/2 by 8 1/2 glass plate done way back in the twenties.

Teiser: That's what Mrs. Newhall said is your first significant picture?

Adams: Well, I think the "Monolith, the Face of Half Dome" was, but there's some discussion about the dates.

Teiser: Oh, you mean the discussion concerns the dates, not the significance?

Adams: Both! This "Shadow Lake" is one of the best ones. I took many on that trip, but these were mostly on 6 1/2 by 8 1/2 glass plates, whereas the other later ones are on eight by ten glass plates and, of course, four by five film.

Teiser: That was well before your announced rejection of pictorialism, and yet "Shadow Lake" is not pictorial in any way.

Adams: Yes. The first prints were made on goofy paper, but the negatives were pretty good. Many were damaged in my Yosemite darkroom fire, so in order to reproduce them now, we must have the prints "retouched" by the engraver. This "Shadow Lake, Mount Ritter and Banner Peak" was done on a five by four film. It's very interesting. The Graflex people put out a roll film holder in which the image proportions were full four by five. Now the standard four by five film is a four by five sheet, but it has a small margin around it-- areas to secure it in the film holder. But these Graflex roll films actually were full four- by five-inch images, which of course no four by five enlarger will take. I have to use a bigger enlarger.

Adams: "The Pass" was made on 3 1/4- by 4 1/4-inch roll film.

Teiser: What pass is that?

Adams: Well [pause]--that's always a question. It's somewhere in the San Joaquin Sierra. I've forgotten the name. It's near Isaac Walton Lake--in that area.

"Upper Iceberg Lake." Well, this is a heavy snow year, you see. This was five by four. This was taken the same time as the other lake.

"Michael Minarets" is the same. I think that's the one that Peter Starr was killed on.

Teiser: Is that in the original proportion? Isn't it narrower than--?

Adams: Well, I don't follow strictly the film format. Negatives come in certain sizes, and sometimes you follow them and sometimes you "crop." And this has always been much better cropped narrower. There's a lot of "disturbance" on the edge of the negative. So a narrow crop is indicated.

This is a four by five, "Rock and Water," in the northern part of Yosemite National Park, in the Virginia Canyon area. It was done in gray light.

Teiser: These hold their full scale quite well, don't they--these reproductions?

Adams: Yes, these reproductions are wonderful.

That is the Devil's Post Pile monument, which is east of Yosemite, on the John Muir Trail.

"Red and White Mountain." We are now getting into the San Joaquin (South Fork) Sierra. This drains into the Middle Fork. Bear Creek Spire, Mount Starr (the mountain off Mono Pass).

This is just "Leaves," somewhere in the Sierra.

Teiser: What kind of lighting is that?

Adams: It's gray light. Sky light or late evening or clouds.

"Pilot Knob"--this has another name. It's an erroneous name and I forget what it is. This is Evolution Creek, all right, but it's not "Pilot Knob." "Emerald Peak and Cloud Shadows." That's near Muir Pass.

Adams: Then here's "Lake Near Muir Pass." I think it's Wanda Lake. It's interesting; was done before the time of polarizers. We are looking down through clear water to submerged rocks. This shows how pure that water was! It's very clear, and the sky was deep blue. If there had been clouds in the sky, you would have had a terrible time with the cloud reflections.

"Black Giant" near Muir Pass is a telephotograph. It is of black slate which is accentuated by the cloud shadows here.

Then "Flowers and Rock." That's somewhere in the Kings River Sierra. "Grouse Valley" is in the Middle Fork of the Kings. The LeContes did a lot of exploration in there.

Teiser: What time of year do you get those big clouds?

Adams: Well, even in summer--July, August.

"Bishop Pass and the Inconsolable Range." That's a spur on the east side, near Bishop Pass. It's a great thunderstorm area; it's usually muttering with thunder. "Inconsolable" is a marvelous name. Theodore Solomons gave many of the names during his early travels, like Scylla and Charybdis, and the Gorge of Despair and many names of classic derivation.

"Devil's Crags from Palisade Creek Canyon"--this is on the Middle Fork of the Kings country. "Cascade, Palisade Creek Canyon." I forget what mountain that is. And this is "The North Palisade;" this is looking northeast--big thunderstorm is building up.

Teiser: Did you often have to work on very sloping ground?

Adams: Oh no. You'd come to the top of a ridge. Then maybe use a long lens, which would avoid foreground.

"Rocks and Grass"--that's typical of almost anywhere in the Sierra.

"Mount Winchell" is one of the Palisades--the northern area. This is at sunset. It is a telephotograph taken from eight miles away.

Teiser: How long a lens was that?

Adams: Well, it's what they call an adjustable telephoto, a Dallmeyer Adon, which has a positive lens in the front which picks up the image, and then a negative lens in the back which magnifies it in relation to the extension. It's not optically very good, but I have done some pretty good things with it.

Adams: Then "Mather Pass"--that's going over from the Middle Fork to the South Fork, Kings.

And "Marion Lake" was up in Cartridge Creek. This is named after Joe LeConte's first wife, Helen Marion Gompertz. And her ashes are there, and a little plaque on a beautiful rock somewhere over here. This was taken with a glass plate. Later we took the Sierra Club outing party across this country, which is about the roughest thing we've ever done, fifteen, twenty miles from Granite Pass. And it was really a tough thing, and the packers were so glad to see the pass down to the lake. But getting one hundred animals over this rough stuff is really terrific.

And "Arrow Peak from Cartridge Pass"--Cartridge Pass goes over into the upper South Fork of the Kings. And then when you cross over beyond Arrow Peak you're going into the Kern River Sierra.

And "Pinchot Peak," which is really Mount Wynne: I misnamed it. And again, the cloud shadows are marvelous. I remember working very hard on that one. Obviously at timber line.

Here is "Mount Clarence King," and this is in the upper South Fork of the Kings River, and there's a little non sequitur here. I mean, if you're going in a given direction, these pictures aren't in the right sequence.

Teiser: They're not entirely as you would go?

Adams: No. Then "Rae Lakes" and the Red Dragon.

Teiser: The water must have been extremely still there.

Adams: Well, there are little ripples, but sometimes the lakes are just mirrors.

"The Mount Brewer Group from Glen Pass." And this is made with a twelve-inch process lens on a four by five film. It is very sharp.

Teiser:: Have you often used process lenses?

Adams: Well, I had one for years--still have it. One of the sharpest lenses I've got. It's just a little thing. It's twelve inches focal length and a maximum aperture of f/11, so the diameter of the lens is only a little over an inch.

Teiser: I thought they did something strange optically.

Adams: Well, as you stop down you usually have to refocus; the process lenses are corrected for near objects. If you don't remember that, as you stop the lens down, you have to change the lens position, because it's not corrected for infinity.

Adams: Then "Manzanita Twigs" could be anywhere in the Sierra.

"Peaks and Talus, Kings River Canyon"—this is the Grand Sentinel. This is taken at the bottom of a huge rock pile, looking up four thousand feet.

The "Kearsarge Pinnacles" are in the upper Kings, on the way to Kearsarge Pass, and Forester Pass, which leads into the Kern River Sierra. This is "Junction Peak," near Forester Pass. We were there on a good juicy, icy year, because usually this is probably all clear of ice even in July.

Teiser: About what time of year would this have been?

Adams: Oh, this was in July, late July.

Then when you're over in the Kern, you have the "Diamond Mesa," where the timber line is very high.

"Milestone Mountain," that's right, taken from a place just a few feet above timber line. That is on the Kings-Kern divide. It goes from the Kaweah Range north to Hamilton Pass.

Then there's "Mount Whitney" from the rear, above Crabtree Meadow--

Teiser: What's the shadow--

Adams: Well, it's late in the day. These are all shadows of big gorges, you see. It's very impressive--one of my best pictures, I think. Quiet things are happening in the sky that are nice.

Then here's the "Whitney Pinnacles (East Face)" and that's from a five by seven negative.

Then "Sky Parlor Meadow" is in the Kaweah group at the base of the Kaweah Range. It is a big meadow on the Chagoopah Plateau. Moraine Lake, Sky Parlor are all very high in that area. "Rock and Water" (a typical Sierra scene). "Mount Kaweah, Moraine Lake"--the Red Kaweah and the Black Kaweah in the distance.

Teiser: Red Kaweah is the--

Adams: The big rounded peak. And then here's the "Kaweah Peaks from Little Five Lakes." The Red Kaweah's way down to the right. In fact, up in the Chagoopah Plateau is where I found my meteorite.

And this is the Black Kaweah, then the Middle and the Red. That is a tree that's just fallen; we are looking over to the peaks of the Kern Canyon.

Adams: And this is "Lake and Cliffs," known as Precipice Lake on the way through Sequoia Park, over the Kaweah Gap, as they call it, which leads you into the Kern River Sierra.

Teiser: Are these made before your Canyon de Chelly pictures?

Adams: Oh yes.

Teiser: Thank you so much for going through your book.

Adams: This is my own copy. You know, there are series of about five or six copies of the ten copies that weren't numbered. [Reading] "Five hundred copies." Well, there should have been, say, 510. "The book was printed...by Wilder and Ellen Bentley." But it's very funny--they say, "engravings and prints." Well, what they mean--they tipped in engravings which came from the Lakeside Press, Chicago.*

Teiser: Well, thank you!

Adams: Now, I don't think that was too much of an ordeal. Boy, this tape is going to be priceless for all these verbal accidents! [Laughter]

I find it very difficult to remember dates. I can usually remember places. I can't remember some of those rock pictures, except that first one, which I know was up in the Virginia Canyon--Cold Creek--in the northern part of Yosemite. But for the "Rock and Grass" and the others, I just have a complete blank. I can still see myself with the camera there, but I can't geographically place them. Of course, the Sierra is so similar, in certain geological belts, that you really can't tell. An expert could pick out a different type of granite, or some other minute variations.

When you go up Cartridge Creek, you have a marvelous stone that is crystalline, shiny, multicolored, and that will blend into granite, and the granite yields to slate--metamorphic rock is the real name for it. It may not be the true "slate" we know of.

Then there's traces of great volcanic action--the ancient lava cap, and so on.

And then jointed granite and granite that's been glaciated and formed the roche moutonnée that you find around Merced Lake, Tenaya Lake, and in the Yosemite country in general. I know very well if a subject is in the Rockies or in the Cascades. But I can't pinpoint things in the Sierra.

*Part of R.R. Donnelley & Sons Company.

Skiing in the Mountains

Teiser: In the 1930 Sierra Club Bulletin you had an article on a ski trip. Skiing was apparently quite new then in this country.

Adams: Yes, they'd been making experiments with skiing in Yosemite, and the company was trying to promote ski activity in the winter. They had a miserable little ski hill called "The Moraine" which is in the east end of the valley. The Tenaya Glacier and the Merced Glacier joined here and made a medial (I think it's called) moraine. And I think the whole thing's about 110 feet high, and when they have snow on the north side you can ski down it. But that was a pretty pitiful ski situation.

Then they built a little hut up on Mount Watkins and would take animals up as far as they could get up the zigzags of the Snow Creek Trail. The skiing up there is pretty wonderful. But all I did was cross-country skiing--climb with seal skins, employ telemark turns and sitzmarks and everything unorthodox you can imagine.

In 1930 I took this trip to get photographs, with the group that went around the High Sierra camps to fill the ice houses. We'd go to Lake Tenaya, and would spend two or three days filling the ice houses with snow, and I'd try to photograph as best I could. The ski instructor, Jules Fritsch, and myself would go off to the high places. We got into pretty tough scrapes sometimes because we really didn't know too much about cross-country skiing in the Sierra.

We went to Glen Aulin and then to Tuolumme Meadows, whereupon everybody came down with some sort of food poisoning from a bad can of food. I was the only one that escaped. And here I was all alone, a storm was coming up, and all these four people were sick as dogs. Should have been hospitalized. We were there for three or four days.

Finally they recovered. The last day we got up at two in the morning; it was six below zero (this is Tuolumme Meadows), and we started out over Tuolumme Pass and down to Merced Lake. And there was no place to stay. There was no food at the ranger camp, so we went on to the Merced Lake Camp. And that was the most exhausting thing I've ever done because I had a fifty-pound pack; had to climb up to the top of the pass and then photograph and then go down, and when we got down about fifteen hundred feet into the Merced Canyon the snow would break through the manzanita. We'd collapse; we'd go through the tangle and we'd take spills, one after the other.

Adams: We got down to the ranger cabin at the foot of the trail, and the bears had gotten into it and there was nothing left. So we had to ski further in mush, as they call it, to the Merced Lake camp, and we were able to get something there. But we were absolutely so tired we couldn't see straight! We spent one day doing nothing. While the others were filling the ice house, Jules and I went up to Lake Washburn (I have quite a number of pictures), then returned the final thirteen miles to the valley.

Teiser: How could you carry your equipment?

Adams: In a knapsack. It was all up in the pack.

I had one very amusing occurrence. I had my camera in my knapsack, with my tripod sticking up and I was following Jules Fritsch, who was a very accomplished skier. As we came down the slopes from Tuolumne Pass we encountered a group of alders, and Jules ducks and goes right through this group. I do exactly the same thing but did not realize that my tripod was sticking up above my head. The tripod catches in these alders, and my skis go up and lace in the trees. They had to come to get me out and take my skis off, and then unravel them from the alder branches. Of course if I'd broken a ski, I'd have been in dire trouble, or worse trouble if I'd broken a leg. But that was the most awful spot to be in!! All I can remember is suddenly feeling the pull back and seeing the skis go up with a loud whack. But I didn't break them.

Teiser: You mean to say that there were four of you out skiing that far away without an extra pair of skis or a pair of snowshoes or anything?

Adams: Yes. It was very foolish, extremely foolish. Well, there was a pair of snowshoes in these various camps. Some of them had been chewed up by animals. But that wouldn't do you any good if you broke an ankle or a leg. I don't know what you'd do. I guess they'd just cut down some trees and make a sled and haul you. You have to figure that you have so many miles to go. If you're a fast walker, you go between four and five an hour, and a fast skier downhill can go very fast. But under different conditions you might take two or three hours for a mile. If there's ten miles, there's twenty or thirty hours. No way out of it; nothing else to do.

Teiser: Well, you must have been a pretty good skier.

Adams: Oh no. Pretty good cross country, in that I had a lot of endurance. And I could make what they call a telemark turn, which is the first thing we learned, where you bend the knee in the inner part of the curve. It's quite a graceful turn. We didn't have the christiana at that time at all. Of course, it's as complicated as

Adams: golf is now. There's all kinds of wax for different things, and different kinds of skis and different kinds of bindings. The old bindings you would just latch on and the leg would come apart before it would leave the ski. Now they have bindings that under a certain stress will give way, you see, which saves lots of bones. But still it's a very accident-infested sport.

Teiser: Did you go on skiing?

Adams: Oh, I did a little, but I never liked it. I liked the cross country, but we did not have winter camping equipment. Now, you know, they can go out for weeks with all this beautiful equipment. I have a space blanket, for instance, which is aluminum foil, and it's light as a feather. If you put the foil [surface on the inside] around you, in ten minutes you're hot. And in hot weather, you put the foil around you on the outside and you're cool. And they have these two- or three-pound down sleeping bags, and the way you do it now, you just dig a hole in the snow and sleep, and keep out the moving air, because the chill factor can be very bad in high altitudes with cold and wind.

Teiser: Well, did the Sierra Club interest continue interesting itself in skiing?

Adams: Oh yes. They have important ski Sections now. Ski mountaineering--cross country skiing--is very much in vogue now, which I think is a wonderful way to really enjoy the wilderness. Skimobiles are atrocious. They're just a horrible intrusion. And while they don't do direct physical damage, because they are on snow, they do create noise and aesthetic damage, and they disturb wildlife, of which a surprising amount is out in winter. And they destroy any sense of wilderness you have. But their tracks will melt. But of course some of them want to clear routes. They want an open forest so they can go through these like you do with a ski lift. But that's only a short distance. The average snowmobile track will be many miles long, which I'm very much against.

Teiser: I read somewhere that you moved your main residence to Yosemite Valley--was it in 1937?

Adams: Yes. My wife's father [Harry C. Best] died in 1936 in San Francisco. And then we negotiated; in fact, her father had formed a little family corporation, which allowed continuity. The general idea had been that when the individual concessioner died, that was the end. We applied to take it on, and the National Park Service agreed, and we moved up there in '37. We were there for quite a few years as our basic home, and rented the San Francisco place. Well, it was impossible for me to do professional work in Yosemite; it's illegal for an individual to do any private work. So I had to

Adams: come back to San Francisco and set up my headquarters. And then the kids were in school in Yosemite and Mariposa. So we commuted. After getting a good manager in Yosemite we moved to San Francisco.

The Sierra and Other Ranges

Adams: I never missed a year in Yosemite since 1916. Never a minimum of less than five or six trips--well, except in the first five years, when my trips were just in the summer. But I think about 1926 or '27 I was there three or four times; in '28 only twice; '29 very much. So in a sense it's always been a second home.

Teiser: Twenty-eight was the year you were married, wasn't it?

Adams: Yes. And I went to Canada with the Sierra Club.

Teiser: You were on that high mountain trip in Canada?

Adams: Yes.

Teiser: Jasper--

Adams: Jasper and Mount Robson, but I did not go to Yellowstone in 1929.

Teiser: Did you publish any of the Jasper pictures?

Adams: A few in the Sierra Club Bulletin.

Teiser: Did you enjoy photographing there?

Adams: Well, some of it's pretty good, but it's not like the Sierra. Sedimentary rocks do not have the shapes and the strength. The Canadian Rockies have a wonderful mood, but it's one of the most infested areas you can possibly imagine--mosquitoes, horseflies; bad trails and very erratic weather. Of course it's quite far north, so you're always up at two in the morning to start climbing. And climbing was very dangerous because it's friable rock.

It's another world, and it's very spectacular. Something like Glacier Park. In fact, Glacier and Waterman Park are much the same. As far as I can make out from pictures, the Selkirks probably give more the feeling of the Sierra, being more craggy and pointed. But whenever you get into lava or sedimentary rock, you do not have the clean-cut form that you get with crystalline rocks.

Now, I don't know what the Matterhorn is--I think that is a hard metamorphic, and that's all right. I guess--well, a geologist might scold me--I refer to a very hard, flinty rock. In Hawaii

Adams: everything is lava. The Rocky Mountains is largely rolling country and of sedimentary rock. It's extremely dangerous to climb on. You're climbing up what amounts to a rock pile that just slides under you. Well, the top of Rogers Peak in Yosemite Park is something like that. In fact, one day we got up to within two hundred feet of the summit, and it was just too dangerous.

Teiser: The Grand Canyon--

Adams: That's all sedimentary.

Teiser: I think I read somewhere that when you first saw it you were kind of unimpressed.

Adams: Well, it's a totally different experience, you see. You get into the granite gorge in the bottom of the Grand Canyon. But practically all of the Southwest is layer after layer after layer of sedimentary and colorful rock which has been elevated.

I'm conscious of the fact that there are tremendous mountain ranges all over the world. I've seen thousands of photographs. And I'm convinced that the Sierra is unique in structure. At least the Sierra seems to be the most livable range. I mean, most of the other mountains have terrible climates.

Alaska weather can be excruciating! For instance, I spent twenty-five days in the Glacier Bay area in 1948. There were only five clear days the whole time. I had six fine days at Mount McKinley in 1947, which was absolutely unusual if you saw the mountain for that long a time. The Himalayas must be terrible-- sudden disastrous weather conditions. And the Alps--a storm can come up within half an hour. A sudden shift of air, and then you have some serious condition. I don't know about the Caucasus-- they're probably fairly tough too, the way they look. Much of the Rockies and the Tetons are beautiful, but there's nothing that has the particular intimacy of the Sierra. Which I don't think of as much as mountains as natural sculpture.

Teiser: And the vegetation?

Adams: The vegetation's extraordinary, but we don't have these rock and ice challenges like they do on the great Alpine peaks. Thousands of feet of ice and snow.

And the Cascades are very beautiful, and have a great rise above base, but they have terrible weather problems. The north slope of Mount Rainier has a wonderful forest. But there's just something about the Sierra that is extraordinary. We're intimately connected with it, but I think it's probably the most subtle and inexhaustible mountain range. It certainly is infested with more people than any other equivalent area now.

Teiser: Is it? More than Yellowstone even?

Adams: Well, Yellowstone isn't a mountain range.

Teiser: That's right.

Adams: There are a few small ranges in it, like the Ibex Peak area. Glacier Park is quite beautiful, but again, it's of sedimentary, stratified rock.

[End Tape 11, Side 1]

[Begin Tape 11, Side 2]

Adams: I must say for the record that I've traveled very little. I've been in the Tetons and in the southern Rockies, and a little of the Sangre de Cristo, very little in the San Juan Range. Just one excursion into the Uintas near Salt Lake. And in the White Mountains, which are east of the Sierra. And then a little in the Southern California Sierras, which are rather dreadful. I mean, barren. And in the Sierra Nevada--and Cascades.

Teiser: British Columbia?

Adams: Yes, British Columbia, Robson and Tonquin in Jasper, the Rockies. And then in Alaska. But never climbing mountains. I never climbed anything in Alaska.

Alaska

Teiser: You were in Alaska in the forties--

Adams: Two trips, 1947 and 1948.

Teiser: How did you happen to go there?

Adams: Part of the national park project. Glacier Bay National Monument, and Mount McKinley National Park.

Oh yes, my greatest experience of all, I guess, was flying from Ketchikan over the coast range at Sunset. We came up to Juneau, leaving Ketchikan at 10:30 p.m.

We left in the Fish and Wildlife plane. We got off at four in the morning, my son Mike* and I. (He was just a kid.) The governor had arranged for us to go on the first flight of the Fish and Wildlife plane, which was the survey flight to see if a lot of

*Michael Adams.

Adams: fishermen in these bays and inlets were really behaving. And this was a Grumman Amphibian. It was the first time Mike had ever been in a plane. And the takeoff, with the two big motors right overhead, is extremely noisy, and Mike--maybe that started him out on his flying career--his eyes nearly popped out of his head.

We took off from Juneau and went over, within a few hundred feet of the mountain range to the east, looked down and could see bear and other game in the meadows. Well, it got very rough and the wind gusty, and we kept on making landings in all these little sounds and bays and taxiing up to people in boats and asking for their fishing licenses. This is the first day of the season; did they have it? And when they didn't have it they got a citation. Then we'd take off for more victims.

Starting at four in the morning, remember the sun was quite high. So we got all the way down to Ketchikan about two in the afternoon. Had lunch, and then the crew disappeared for two or three hours on business. As we landed at Ketchikan, which was the first time we landed on the ground, the pilot discovered that the maintenance man had forgotten to put any hydraulic fluid in the left wheel plunger. Now, if you've been in a Grumman, there's only about two or three feet distance between the ground and the fuselage, and these little wheels come down without much space to spare!

Our pilot was extremely good, and as soon as he landed he knew something was wrong, so he gunned the plane up, and he said, "Will you all get over on the right side and keep your weight on that side? I have plunger trouble, and we'll make a landing on one wheel," which we did. And finally came down, and the pontoons on the wings on the right side bounced. Then he tried to get it fixed there and couldn't; they didn't have the right equipment to get the fluid into the cylinder. So we had to take off on one wheel, and we all had to stay over on the right side. I really was a little worried there, because at a high speed you can get a ground loop. But we took off; it was very late in the day--ten o'clock. We flew up the coast range at evening--sunset, right along the crest. It was just like the Sierra during the Ice Age. You'd see things like Half Dome emerging from the ice and many beautiful peaks and the incredible color of sunset and all these big glaciers, you know, flowing down to the sea.

We landed at Juneau at about 11:30 p.m. That was really a day.

I had another flight with an exploration party. This was the supply plane, and these people were surveying and traveling all around some of these very high peaks of the coast range. The function of this plane was to drop supplies at certain locations.

Adams: The explorers had put out a red-orange cloth on the snow. You'd see this little speck. Then we'd fly over and drop the load of supplies.

I was in one of the compartments with a big sliding floor over it, roped in, trying to get pictures. We went around these big peaks, and all of a sudden it grayed over.

When you're in snow country and the sky goes gray, you don't know whether you're at six hundred feet or six feet or six thousand! In such conditions the rule is to get out as quick as you can.

The same thing happens in very still water. If the amphibian plane comes down in still water, you can't tell how far up you are. We had to throw wads of newspaper around in Glacier Bay a couple of times, to know what the elevation was.

Teiser: To make the water ripple?

Adams: No, to give an object that you can focus on. In that case, they put the nose of the plane up and just drift in, and the tail of the plane hits first and you hear a hissing sound. But you can't tell much. You're going too fast to see anything if your paper goes by.

So that was quite a flight. And then we had several flights into Glacier Bay and several places where we had to go up and down and taxi on the water and see if there was no ice. Because a relatively small piece of ice can do an awful lot of damage to the plane's fuselage.

But flying in Alaska is just like taking a taxi. There's no other way. Well, I suppose there is, but to walk in the tundra and the wet stuff or go by boat--oh, terrific! It's a long way.

Aerial Photography

Teiser: Have you done much aerial photography?

Adams: Well, no, I can't say much. I've done some, and the two things I did in Fiat Lux were the rice fields in the northern Sacramento Valley and the freeway in Los Angeles. I'm very happy about those; they're very good.

Teiser: You must have been low over the freeway.

Adams: I was, illegally, two thousand feet down, and we were flying with a good pilot, and when I told him what I wanted, he said, "Well, these regulations; okay if they don't watch you too closely." The police helicopter passed under us about 150 feet below, enough to rock the plane, and he said, "Well there's no point in immediately going up now. They've got me if they're going to get me, so just go ahead and do this job."

So we were going right over the crowded freeway. I kept thinking, "A single-engine plane!" If that motor had conked out, where would we have landed? I was very glad to get back to Santa Monica. He never got a citation. [Laughter]

Teiser: Do you use ordinary equipment or aerial--?

Adams: I have Louise Boyd's Fairchild aerial camera, which she used in Greenland. She used it mostly for five by seven stills on the ground. With a complete set of magnificent filters (optical-flat filters). But now with cameras like the Hasselblad, and the beautiful lenses and filters and a little high-wing plane, you can do awfully well. Of course now, photogrammetry surveying and really accurate mapping stuff--that requires very precise equipment and materials. The slit photography is terrific. There's electronic sensors that pick up patterns of objects, a difference of light and shade on the ground, compute them, and establish the speed of the plane, and that controls the speed of the film moving by the slit. And at sixty thousand feet you can see gravel between railroad ties. But that takes special ultra-thin emulsions and extreme precision of operation.

I can't call myself an aerial photographer at all. I think I would like it, but you see, when you're working that way you have to have a high-wing plane and you usually take the door off. And you have to keep the camera out of the slip stream. The novices would go up with, say, something like a Speed Graphic, and they'd just get so excited they'd lean out, and the slip stream hits the camera and WOW--away goes the bellows! [Laughter] But in a certain space you don't feel the air at all, you see. But if you put your hand out too far you may break your wrist, even at ordinary speeds.

Ever put your hand out driving a car on the highway on a hot day? Well, that's nothing, but if you were going 150 miles per hour and more, you can break your arm.

Teiser: Do you know the photographer who's been taking aerial pictures of the Bay Area? He lives in the East Bay.

Adams: Well, there's a Sunderland.

Teiser: Yes, Clyde Sunderland.

Adams: He is a very factual, an extremely competent record photographer. The greatest aerial artist is Bill Garnett. Nobody can touch Garnett. He doesn't do the ordinary kind of work, you see. Sunderland is a person that will make you a completely accurate aerial survey or photograph. Then there's a man named Bob [Robert] Campbell who has done some perfectly beautiful things of salt flats and other subjects. Creative photography in the air is a terribly important phase of the medium.

In fact, Bill Garnett is somebody who is worthy of an autobiographic approach, because there's nobody who can touch him anywhere. There's never been any aerial pictures made that are as beautiful and as convincing. What he does with the natural forms! He pilots his own plane. He's a very fine flyer.

You see, when I'm photographing, I'm sitting with the pilot, and I'll say, "Now, I think it's coming! Now, you turn a little to the left and then bank." Well, if he's sympathetic, he knows. But you know you don't drive a plane like an automobile. By the time you say those things you're quite a little ways off. So getting a few pictures may mean a four-hour flight. The pilot would bank, but you wouldn't get it right. And then he'd go a little further back, bank again, and you were too close!

Now Bill Garnett can sit in there and he can control the plane with his knees and make his photographs. Because, under good conditions, the plane can drift and float along--if you're a good enough pilot to pull it out of a spin, etc.

The plane becomes part of the creative instrument, and that's the important thing about Bill. In all my experience, and I've seen thousands of pictures, there's nobody that can come anywhere near him in the aesthetic command of his subject.

Teiser: Does he work in black and white?

Adams: Yes, and in color. Beautiful stuff. Lives up in Napa; Congress Valley Road. Teaches design at the University of California. Doing a wonderful job. I'd really recommend him as somebody to be interviewed.

There are some other aerial photographers, but for some reason or other they don't "click;" I guess it's a matter of anticipation, because things happen pretty fast. Garnett has a picture of an estuary that looks just like the branching of a tree. A most beautiful thing. My friend [David H.] McAlpin has got one. It's a print about twenty-four by thirty-six inches--all black and white, on a black block. Something like that monument in 2001! And all it is is just these lines, and the estuary, the light shining on the

Adams: water, just like a great branching tree. It was an absolutely honest photograph; there's no retouching. And then he did the one of the birds flying against the water. It's in [This Is] The American Earth. And the great picture of Los Angeles--that terrifying perspective.

Teiser: Oh yes. In the same book.

Adams: But I can't begin to tell you how great I think he is. I think he's one of the great living artists.

But you can't count me as an aerial photographer at all. I've written a little chapter on some of the technical elements, which are very simple. I think the technical point is very simple to manage, but the aesthetic--getting the moment and the point of view....You're moving at a fairly high speed and the closer you are to the object, the shorter the exposure must be. You have to use filters to cut your blue atmospheric haze. You have to use rather high speed film, with a four times filter, and you have to develop for more than normal contrast because contrast lessens as you go higher. You can get poor image quality in black and white, and lots of grain.

Now, in color you don't have high speeds, but the aerial lenses, the lenses that are corrected for infinity, work best at very large apertures--say up to $f/2$ or 2.8--and that permits you to make short-exposure photographs. I have this new Hasselblad with a 100 millimeter lens, which is corrected for extreme definition. Al Weber uses it, and he said there's nothing like it at all. Use the lens wide open, at $f/4$, and it's absolutely diamond sharp; the lens is designed for infinity function. There's no focussing. Everything has to be very accurate at infinity. But if you use a monochromatic filter, like a red, green, or blue, you'll get an extremely sharp image, with single-component lenses which are not corrected for chromatic aberration.

I have a picture taken in Tuolumne Meadows of a skier coming down Lembert Dome; it's done on orthochromatic film with a Graphic camera and a Kodak Zeiss Tessar lens. It is incredibly sharp. When I tried to use that lens on panchromatic film it was terrible, because it wasn't corrected in the red area of the spectrum. In other words, it focussed the reds at a different plane, so everything was fuzzy, you see. So with panchromatic film I'd have to use with it a minus-red filter, keeping the transmission orthochromatic (blue and green), and I'd get a very sharp image.

There's all these little things that a lot of people don't realize.

Yosemite and the Sierra Nevada

Teiser: This is our copy of Yosemite and the Sierra Nevada that, you see, has been well used. Would you go over it with us?

Adams: Yes. [Looking at book] Well, what I did with this book was to consider the whole Sierra Nevada system. But the fact is that when we think about our boundaries of the national parks, they don't have any reality in nature. You know, the system is: here's the ocean, and the rivers go back into the mountains. So the pictures are in order of John Muir's experience—he came in to San Francisco from the sea. This first one is taken before the Bridge was built--1932 or '33.* And that's one of the worst reproductions ever made of "The Golden Gate."

And the second one is a foothill in the coast range, not too far from here. ["In the Mount Diablo Range, near Pacheco Pass"] It's not near Pacheco Pass, that's a mistake. It's about fifty miles south, but it's in the same country.

And then, here's the great San Joaquin Valley, with these storm clouds ["Rain Clouds Over the San Joaquin Valley"]. And John Muir went through that when it was a garden of wild flowers.

Teiser: Did you just happen upon that?

Adams: We were driving, and I suddenly saw it; I get out and make a photograph. This is a very rich image, but these are, might I say, lousy reproductions! The Land of Little Rain is much better.

But you see, here, I've seen the Golden Gate, now I'm crossing the coast range, then into the San Joaquin Valley, then into the foothills of the Sierra. And these statements [quotations printed on the pages opposite the photographs] of course are from Muir. And this ["Slate Outcroppings, Sierra Foothills"] is on the way to Yosemite. He probably passed this way with his sheep. And here are sheep ["Flock of Sheep, Sierra Foothills"]. This happens to be a little further north; it may be fifty miles north of Yosemite, but it's--you know--exactly the same kind of country. And this again ["Dead Oak Tree, Sierra Foothills, Above Snelling"] is very typical of the country near Hornitos, above Snelling.

*It is dated 1932 in the book.

Adams: Then the first view of Yosemite; this is taken from a point about a thousand feet west of the tunnel, in a thunderstorm ["Yosemite Valley"].

And then you come into the detail of the valley, in autumn ["Cathedral Rocks, Autumn Tree, Yosemite Valley"], and the Merced River cascades ["River Cascade, Yosemite Valley"]. And a very tranquil scene, of which I have several variations ["Late Autumn Evening, Merced Canyon West of Ribbon Creek, Below Yosemite Valley"]. This isn't the best one. Down in the Merced Canyon in autumn. All these are supposed to glow, you know, showing separate leaves and details.

And "El Capitan;" "Three Brothers;" "Cascade Fall;" floor of the valley ["On the Floor of Yosemite Valley"]. The lower valley in winter ["Winter, Yosemite Valley"], a horrible reproduction; just unbelievably bad.

Teiser: How does the original differ from that?

Adams: Well, the original is a very rich, subtle photograph, with all the whites separated. All this snow gleams. All this snow white is different from the clouds. This is just one of the worst reproductions you can imagine.

"Nevada Fall" is fair, but perfectly flat light. Even in the print it's very difficult to get water texture, because it's absolutely "flat." And you see the rainbow--it's 40° in angle to the sun, so the shadow of your head would be down about here. And I have to tell you about an experience--something that has to be seen, because it's hard to describe. But, if you put your left thumb to your nose and make a gesture which is considered rather vulgar, then take the thumb of the right hand and put it to the little finger of the left and stretch it at right angles to your left hand, it will describe a 40° arc. Now, if your hands are small or big, as long as they're the same size, it doesn't make any difference. But you can find out where a rainbow is going to be. Because if you point this finger at the shadow of your head, here is the rainbow area at 40° plus or minus. [Laughter]

Well, we had an experience when I was doing that one time at Bridalveil Falls, all alone. And I thought, "I have two or three hours to wait." I could see that, because it would take quite a time to get the rainbow anywhere near the falls. I was describing the arc (I think it's 42.3°, something like that. I'm not that accurate). I turned around, and here are two elderly ladies looking at me in amazement. And I said, "I'm just trying to find a rainbow." Whereupon they stepped back two or three paces. I said, "No, really. I'll give you the technique." So they both came over. And I said, "Now you see the shadow of your head. Now you put your

Adams: finger up here, right along the eye, and your little finger is right on the shadow of your head, and now do this, and right where the little finger is, is the arc of the rainbow." Well, that was interesting. They were doing it. Then we turned around, and a whole busload of people had arrived, and they were all looking at us with their mouths open, you know, and I said to them, "We're just trying to find rainbows," whereupon they all got back in the bus and went off. [Laughter] That's a true story; it was one of the funniest things.

Well, number seventeen ["Craggs on the South Wall, Yosemite Valley"] is just crags on the south side of Yosemite Valley. This is Glacier Point. Then the Mariposa Grove in winter. More Yosemite in the spring ["Yosemite Fall, Orchard in Blossom"]. Back to Yosemite in winter ["North Dome, Winter"], with a detail ["Winter Forest"]; sunset clouds ["Storm Clouds"].

I guess we decided on sequence on an aesthetic basis. Dogwood ["Dogwood Blossoms"]; top of Yosemite Fall ["Yosemite Fall"]. These are all Yosemite, and it goes on for quite a little while until you begin to get in the High Sierra--

V. Adams: [Comes in] This is Liliane De Cock.

Adams: She's worked with me more than nine years, you know. She married Douglas Morgan, my publisher. She's doing a wonderful job. She's been working on my monograph.

[Back to book] Well, "Merced River Below Merced Lake," different forests, Half Dome in a storm. Then there's just a few of the High Sierra, which we feel, if we do it again, must be in better balance.

Teiser: You'd put more of the High Sierra in?

Adams: I think I would. Lyell Fork of the Merced. Tenaya Lake again; Big Trees, Merced Lake--I look at it now and I don't see why I made this particular sequence.

That's the most beautiful juniper I guess there is, up in Triple Peak Canyon ["Juniper, Upper Merced Canyon"]. Nobody ever sees it. I'd like to go up again. Tuolumne Meadows, and then it goes on into higher country. Now it goes over the Tuolumne Pass, which is to the south, and Merced Canyon. This is typical ["Grove of Lodgepole Pine"].

Here comes "Banner Peak and Thousand Island Lake," a hideous reproduction again! And Mono Lake on the east side. Then we go way down south, you see. Mount Williamson on the east side. Moro Rock in Sequoia.

Teiser: How did that book get started? Did the publishers ask you for it?

Adams: Yes. Well, it was done with Houghton Mifflin--

Teiser: There's a review of it here from the San Francisco Chronicle.

Adams: Oh, I didn't see that. Let me see.

Teiser: Joseph Henry Jackson wrote it. I think he must have reviewed all your work.

Adams: Yes, he was very good to me.

Incidentally, you see how this clipping yellows. That's because of the sulphur content of the pulp paper. [After reading it] Yes, that's a nice review. Can you make me a copy of that some time, because I really don't think I have one.

Teiser: Sure.

Adams: Well, I think the books in the main have been successful, but it wasn't until considerably later years when we really began to think of fine reproductions. That's when the "My Camera" series came, My Camera in Yosemite Valley, then My Camera in Point Lobos by Edward Weston, then My Camera in the National Parks. These were done by the H.S. Crocker Company--beautiful press work, and the engravings were done by Walter Mann, with Mr. Raymond Peterson in charge. Now, I think we've mentioned this before, but these were really milestones, because I still think they're the best letterpress engravings ever made.

But letterpress is now passé and hardly anybody knows how to use it, and the two-plate offset is far superior as far as tone control. So these books, if they're republished, would be done in offset. By somebody of George Waters's quality.

Teiser: Do various people do press work for George Waters?

Adams: No, he is a producer. In other words, he makes the plates and does the actual printing. Now, we did a big advertising campaign for the Wolverine people [Wolverine World Wide Inc.], and he made negatives for them.

Teiser: Oh yes. I sent in a dollar for a poster-size reproduction of one.

Adams: Wolverine had four thousand orders on that first advertisement--extremely satisfying, you know. Waters didn't do that. He did the catalogue. (I have to give you one of the catalogues.) He did the plates for that, but they had to be printed in the East. Very

Adams: complicated. He did the negatives from the prints. Then the negatives go off and are "separated" and printed by whatever printer does the job. This one was printed in Michigan. Then Waters made the negatives for the advertisement, which they would take and enlarge to any size they want. So he was trying to capture my photograph--the quality--which he could do better than a person who didn't understand it. But the reproduction in [the advertisement in] Life and so on was lousy anyway, so it really doesn't make much difference, you know.

And those plates go out as paper matrices, usually, and of course, Life is printed in quite a few places simultaneously. And you know, when you get Time and Life out here, you get advertisements relating to the West Coast, and if you're in the Midwest, you get advertisements relating to the Midwest, and so on in the East and Europe.

It's a very complicated thing. The pattern is set up and there's so many pages of ads, which are made up in the particular area, which fit into the main plates which come from the main editorial office.

Teiser: I think the reproduction that I saw was in the Examiner Sunday gravure section recently.

Adams: Oh, was it there?

Teiser: And I thought it came out quite well.

Adams: I've only seen the one in Life. But they spent a fantastic amount of money on these advertising campaigns. I guess that one page in Life was probably \$45,000, just for that issue.

Teiser: But what a wonderful way to advertise!

Adams: They're very good. And then that little column off to one side. We're hoping we can continue.

Yosemite Photography Workshops

Teiser: Back to Yosemite--do you want to start now or do you want to leave this for tomorrow or the next day? We'd like to ask you about the history of the workshops--when they started and how they've gone, and so forth; who's been involved.

Adams: [Somewhat tentatively] I think I can do that.

Teiser: The brochure says this is the twenty-sixth year, which would make it 1946--

Adams: Well, no; before the war [World War II], I think, several times we had what was called the "U.S. Camera, Ansel Adams, Yosemite Photographic Forum." Dorothea Lange and Edward Weston, Rex Hardy and myself. We had quite a group.

Teiser: What's happened to Rex Hardy?

Adams: He was here the other day. Lives in England. Is going to move back here.

We had a big enrollment. And then Hitler invaded something, and that put on a war scare, so the enrollment was cut down by half; yet it was satisfactory. Nothing further happened until after the war. Then we revised it, which I would say was in--when was the war over?

Harroun: Forty-five.

Adams: I think we had the first one in '46. It's been a continuous enterprise since, plus several others in the year. Now we have this June one coming, and Al Weber has a print one in August, and I have another one in the end of September. But I'm going to have to back out of it soon and let other people do it more and more. But the main June workshop is very closely associated with me.

Liliane [De Cock] came out all the way from Scarsdale; she's going to teach. And Barbara Morgan's coming--her mother-in-law and a great photographer.

Teiser: Originally, then, it was cosponsored by U.S. Camera?

Adams: The first one was U.S. Camera, with a very elaborate folder. They had, you know, a magazine.

Teiser: Did you have a big turnout then?

Adams: Well, we had sixty-plus enrolled. Then, as I said, the war had started in Europe, and it cut down enrollment to less than half. Eastern people were too scared. Because it was pretty precarious when Hitler started invading Sudetenland and Austria, etc.

Teiser: Did Edward Weston start teaching again after the war, then?

Adams: No.

Teiser: Was he a good teacher for groups of that sort?

- Adams: No. He was a very bad teacher, but a wonderful person for an example. You see, he was like Brett [Weston], his son. Now, Brett doesn't impart any detailed information. He has no technical knowledge; he just has his own extraordinary intuitive way. He goes out with a camera and he sees things the way he sees them, and lets people look through the ground glass of the big camera--it's quite a thrilling experience. But technically--he prides himself on not being able to add five and four, you know. Many artists do that. But he's perfectly capable of doing it.
- Teiser: Did Dorothea Lange have the same sort of individual approach?
- Adams: No, her approach was "seeing" and people--the social, human meaning of photographs. Extremely important. Barbara Morgan--I don't suggest her as a teacher in the technical sense, but she inspires people; she comments on their work. She speaks of feeling; she talks about the intangibles. And those people are just as important [as those who discuss technical matters.]
- Teiser: What did Rex Hardy do?
- Adams: Well, Rex was sort of a journalist type.
- Teiser: Did he teach classes, or did he work with individuals?
- Adams: Well, you see, we don't work that way. We have groups, seminars--we play it by ear. And the most important thing is to be in the field. A person has a problem, so you help him out with it. Then the instructor gives some talks. He can talk about artificial light, and the small camera, or anything in his field. This year, we have quite a variety of very good people. We have Dorr Bothwell, the painter. She's very stimulating.
- Teiser: Has she been participating for many years?
- Adams: Yes, quite a few years.
- Teiser: Your assistant, Gerry Sharpe--?
- Adams: Yes, unfortunately for us all, she died.
- Teiser: Could you speak a little about her?
- Adams: Gerry was an extremely gifted gal. She had psychological troubles in adjusting the creative world to the real world. But she was an extraordinary, fine photographer. She had a little more technical knowledge than people give her credit for having. She knew. Her negatives and pictures were always pretty much "there." There wasn't a lot of trial and error in her work. And she had this very

Adams: important, rather impressive emotional feeling about things. Her greatest ability was to sit down with an individual and talk about their work. And they'd go away just simply inspired, because she could really dig into them, if you want to use the term. "Why did you do this?" she'd say. "Why did you see it this way?" You know, talk back and forth, instead of being didactic. She got a Guggenheim, and she went to Ghana, and was starting in on really a very important program, and made some beautiful photographs, and then was involved in a tragic accident. A doctor was driving out to some village in a Volkswagen, and they hit a truck, and she nearly lost her leg, and was laid up in a hospital there for weeks. Then she came home and almost died; tropical injuries are bad. That sort of knocked everything out of her. I mean, she never really regained the impulse to create. Finally, she had a job in the Winterthur Museum [Wilmington, Delaware], but I think the bottle got the best of her and she just couldn't stand being restricted to a job. She was born in New Jersey, but came west with the idea of spending her life photographing early Americana. Her disability really got her down, and then the decline started, and she just kept drinking, and that was the end of it.

It's typical of very gifted people who can't relate to the realities of life. Her photographs are quite remarkable. We were very fond of her, and her passing was a great loss.

Teiser: You've had some very talented people--

Adams: Well, Liliane is just marvelous. She has a Guggenheim fellowship now, you know. Right after she was married she got that. That was too much. Her husband figured it out that she'd worked for me nine years, three months, two weeks and three days. She knew where everything was. But she's quite a creative person--easily one of the best of the younger people.

And Don Worth worked for me for several years. He's a very fine photographer. He teaches art at San Francisco State University.

Teiser: I remember a picture of his of your lighted studio window, from outside.

Adams: I happen to have a very fine personal collection of photographs. Never realized what I had. But the Lands very kindly gave us some Clarence Kennedy portfolios. That in itself is very important. And then I have all the portfolios of Weston, Minor White, Don Worth, Dick Julian. Then all kinds of individual prints. [Charles] Sheeler et al. And I have early Brady images--my prints, though. I have daguerreotypes. I don't know what to do with them.

Adams: I should get an interne, a young person from a college who's studying photography, and have him come and analyze them and catalogue them and document them, because you know, a thing like that is an awful job. Then the next step is the evaluation; then the next step is what to do with them.

Teiser: I trust they're all dated!

Adams: Not too many. I'm not the only one that fails on dating! [Laughter]

Well, let's see--the workshops--at first we had only the June one. Then we decided that when we put in the new darkroom...The government gave us the renewed fifteen-year contract, and they always require improvements. We have spent quite a little money improving the studio and putting in a darkroom, which is a very good darkroom, especially as a teaching and demonstration one.

There's no reason why we couldn't have workshops and groups the whole year, but I myself have to withdraw from that because it's just too much. To get good photographers to come up and conduct workshops is our present plan. All I can say is I'm the general director and I'm not going to let some inferior operation go on. Al Weber, who lives here, is one of our staff members, and he's a very good photographer. He's having a workshop in August, and we're going to develop him more. And we're getting in the fall workshops. We're getting a great variety of photographers, like Wynn Bullock, and Jerry Uelsman, and top names to come.

And then the Friends of Photography--of course that's another subject. Maybe you'd better put that down as a separate subject, because that ties into the theory of the f/64; really it's the latter-day f/64 group, but with a modern slant, as far as I'm concerned.

So let me see--what would be logical? Oh, I might say that I have given workshops in the Museum of Modern Art, and the museum in Memphis, and Rochester, and many other places. Workshops last sometimes a week, sometimes they're just two days. I hate the term "workshop," but there's no other term in the language that seems to cover exactly what that means. Because a seminar's something where a whole group of people get together and exchange ideas. In the Friends of Photography we say we're having an "event," but that's very ambiguous too.

Teiser: The word has become so closely associated with these workshops, you'd have a hard time changing it now, I should think.

Adams: Yes--there are so many hundreds of workshops given, and there's such a fantastic interest in photography. It's a whole new world. It's really a tremendous thing, and relates to thousands of people.

Adams: Of course, the basic idea is that photography is a language; you have the aesthetic approach, and the documentary, and the journalistic, and the scientific, and many other categories. We use the English language to depict the world in the written word. We have also the photographic language to express the visual world. And the audio-visual world--well, all colleges, schools, institutions, companies, all have what is usually called the audio-visual department. It's a fantastic growth. I mean it's an industry, something that represents untold millions of dollars and hundreds of thousands of people working, making slides, documentary records, etc.

I'm not plugging anybody, but the Bell & Howell people have just come out with this new copy machine, which happens to cost seven hundred and something dollars, but it is fantastic in the sense that it makes copies of anything in just a few seconds. It makes transparencies for what they call "overhead projection work." You can make a transparency, and in about two or three minutes have a hundred or two hundred ditto copies, which you can put in the hands of the audience while you're projecting images on the screen. It's one of the great, I think, steps forward, because it's not litho reproduction, but it is a quick means of communicating type-written pages, copies, letters, even pictures in a crude sense. Many advanced duplicating systems are being developed.

[End Tape 11, Side 2]

Skill in Music and Photography

[Interview X -- 3 June 1972]

[Begin Tape 12, Side 1]

Teiser: ...then your career in music and your career in photography have been related?

Adams: Yes. Well, I think it was Wilenski who said that all art is the expression of the same thing. But actually, I don't necessarily subscribe to--what would you call it?--a two-dimensional, mystical relationship because when we start reading qualities of one art into another, we get in trouble. It's like when we try to talk about pictures, or when people give literary titles to music, like the *Moonlight* Sonata.

I think I mentioned once that Huneker criticism of the B flat minor Sonata of Chopin, which contains the Funeral March (the "Marche Funébre"), which is really the stylistic interpretation in the Adagio, but which is used as a funeral march. It was not Chopin's intention that it be played with a brass band and used in a procession

Adams: Hunneker accepted that Romantic interpretation, and then said the last movement, which is Presto Furioso, I think, is the "night winds rushing over the graves." Well, that kind of relationship to me is completely nauseating. I mean [laughs] it's a concept to which I can't possibly relate. What happened is that the expressive capacities of the music were undoubtedly damaged by literary interpretation. But the best thing, the thing that probably saved me, was the strict discipline involved in music that automatically carried over into the photography. There was no such thing as "schools" in photography at that time. It was a very sloppy art, and only a very few people gave it any critical or technical dignity. There was no training in photography to speak of.

So I could have been a real "sloppy Joe" photographically, if it hadn't been for the discipline which is absolutely required for music.

Teiser: When you first started taking photographs and doing your own printing, did you print and print and print from the same negative to teach yourself how to do it?

Adams: Oh yes. Well, in the first period, it was empirical--trial and error, over and over and over, until I got some results. Then later on, when I established the technical basis of the Zone System, then I knew much better what I was doing. But I still have to print quite a number of times to get the expressive result, because you can't put that on a slide rule. The fact is that it is so completely subtle, you can't really physically describe it.

Teiser: You said yesterday that Mr. Mazzeo was a good photographer and not a very good painter.

Adams: Well, I'll put it this way: his prints in no way come up to what he sees. Now, this "seeing" is used in quotes. As Edward Weston would say, the "seeing" is not adequate, or the "seeing" is great. As I've mentioned before, the internal event and the external event are so terribly important. And with people like Mazzeo being interested in birds and things--the external event is really what interests him. He does pictures because the subject interests him, and he conveys the subject. But he doesn't have the design sense that Brett Weston has or Edward Weston had, for whom the photograph becomes an object and not just a record of a subject. It becomes something in itself. But Mazzeo is a great musician!!

Teiser: Are there people who can make a good negative but can't print it, and people who can print but not make a good negative?

Adams: Well, put it this way: there are many people who could make absolutely adequate negatives with no expressive intention. And it comes down to a complicated thing: your visualization is in relation

Adams: to the final image, and it usually works out that the person doesn't make a good negative because he's failed in some way to visualize. Then in some way, by hook or crook, he does the best he can in the darkroom, you see.

I have many very bad negatives that I can take to the darkroom and really do a lot to bring up some expressive quality. But I can have an absolutely perfect negative, and if I didn't have the feeling or the sensitivity, simply nothing would happen. In many cases I've taken other people's photographs, like some of the early photographs, and have made prints which were, frankly, much better than anything they made technically, because I have better materials and controls than they had.

When I say better, I mean the print had more impact. And I know that Bill Webb has done the same thing with the [Adam Clark] Vroman negatives. He's made really wonderful images; much better images than Vroman ever made. And in my case, the two examples are the San Francisco fire and the Chinatown street of Arnold Genthe. Genthe's prints are notoriously weak and fuzzy and (quote) "artistic" (unquote). And it's the same thing with his records of the fire. They're pretty tough; some of those negatives are very, very bad.

Teiser: How about O'Sullivan? Did you improve--?

Adams: I never worked with any O'Sullivan negative. I certainly improved on the Bradys, but I never printed any O'Sullivan or Jackson. I printed some Wittick, Brady [pause]--well, when we say Brady, we don't know who--it could be any one of his photographers.

You see, Brady was a promoter, not a photographer. He had a business called Matthew Brady, and he employed photographers. And on the envelopes of all these negatives that were put in the National Archives were written the name of the photographer. But he never gave them credit in the published work. Only more recent historians have done that.

But Roy Stryker, when he took on the farm resettlement project--you know, the big "dust bowl" job--always gave the photographers leading credit. It would be a photograph of such and such "by Walker Evans, Farm Security Administration Historical Project, Roy Stryker, director." That was the way it would be documented--the photographer always got the leading line.

Teiser: I'm sorry, I took you away from--

Adams: The music--

Teiser: You were telling us yesterday, after we were taping, about the kind of pianist you were and are, and how your technique differs from--

Adams: Well, probably that sounded a little too pompous. The fact remains that I have a very light hand. I have an ideal violin hand. And my very good friend, Cedric Wright, who was a violinist, had an ideal piano hand--we should have grafted them. [Laughs]

In any event, my technique was based largely on the dynamic finger action. I think it would be called the Leschetizky method. Now that goes back to the turn of the century, and the fundamental technical pattern is that you lift, strike, and relax. You practice hours: you lift, strike, and relax, until it becomes absolutely free. If you lift, strike, and hold down, you immediately tighten; then you have no flexibility.

Then the same thing would apply to the wrist for certain things. Now, there's a difference in the relaxing--it would be legato (because the key is held down), or it would be a portamento, or it would be a staccato. Then to reinforce the sound, I would bring in some weight. But, there are whole schools of weight playing in which you sort of "pour in" your weight. You see people using shoulder or arm, and that almost invariably results in less brilliance of tone. The ideal situation is that you balance them out--your weight and your dynamics--depending on your hand structure.

Now, Victor Babin, the late pianist, he was really marvelous. He had very large hands. And he had complete control--magnificent finger action and complete weight control. And he could produce the most incredible sounds!

Harold Bauer, when he was playing a concerto with an orchestra, could actually imitate the quality of an instrument. If a flute or string passage was to come, say with a Schumann concerto, his piano would take on that quality. Now it's all illusionary, because it really can't imitate; it still is a percussion instrument. But it isn't the way you hit one key; it's the time, the dynamics, in which you hit the next key.

You see, there's no real way in which you can change the sound of the piano at all. Now, the harpsichord is different; you strike it and you can vibrate, and you can get a little pulse in the sound. But the piano--the hammer strikes the key and retracts. So there's no control but volume and the relationship to the next note. Intuitively, it probably could be explained. I think even [H.L.F. von] Helmholtz touched on that. He explained that when you strike a note--and this depends not only on the fact that it's a piano or an organ, but say that it's a piano, upright, square, or grand--when you strike that note, you have produced the fundamental tone, and then you have a whole series of harmonics, and those harmonics are not necessarily the same that you get with the open strings. But they're there. They're even within the part of the strings that

Adams: are dampened. There's a very subtle resolution. And then you anticipate this resolution, and you play the next note; and in anticipating it, you also have to bring in this psychophysical law.

So a beautiful touch is something that makes the sounds seem to flow with absolute completion. You don't worry about them at all. And a poor touch--we all know what that is. It drives you up the wall. Because here's people playing precisely--everything that's written, playing everything in time, in unison--but they have not got this sense of the connecting sequence, which can't be called just simply "legato." It is legato, but that's too simple a term.

And in photography, when you're photographing actions--I think I mentioned Cartier-Bresson as anticipatory. There's a girl who's walking toward us, toward the camera, and I anticipate her; I want her at a certain place. If I wait until she's there, she's caught beyond! So I have to see this possibility and feel all the relationships. There is about one-tenth second delay between "seeing" and operating the shutter.

But now getting to the music-photography relationship. I don't see anything except certain standards of discipline, which are obvious, and then standards of taste or aesthetics. It's impossible for me to think of people spending their lives in music and not having good taste in the other arts. But that is not the case, because I have been in music studios--in New York, some of my good friends, very fine musicians--with the worst possible furniture and the worst possible things on the wall you could imagine. I mean, absolutely no sensitivity for the visual.

So there's nothing cut and dried in this relationship!

Teiser: What about the very simple thing of manual dexterity?

Adams: Finger dexterity is something which is very important--well, unless you're crippled, as I partially am with arthritis now--nobody has any trouble with a camera. It's rather a gross instrument in a way. Some people are very rough with cameras and mistreat a delicate instrument. That's something else. But I can still set the shutter with accuracy, and I can still operate the camera. I may have difficulty lifting it onto the tripod. The dexterity is really partly when you're developing films in the tray that you get a very sensitive feeling of the finger in handling these things. But I don't think being a pianist or not would have any effect on that.

Now, if you were a watchmaker or putting a shutter together or something, that's another world. But I really don't think dexterity in general is so important.

The Friends of Photography

Teiser: We spoke yesterday about the Friends of Photography. Do you want to go into that now?

Adams: Yes. Well, that's a continuation of my attitude towards the f/64 group. In other words, not exactly the same motivation. But, there was no place, anywhere in the West, where a group of creative people got together. And I thought about it, and we talked about it. And one day Cole Weston came out; he was managing the Sunset Center [in Carmel]. He said, "Well, if you want to do something in photography, there's a space available for a gallery." And that sort of triggered it off, and I got ahold of Wynn Bullock and Mazzeo and a few others. "Let's do something about this." [Interruption]

We saw the space, and then we got very busy and raised a little money, and then organized the Friends of Photography. It was a pro tem committee which secured the place. Our lawyer then drew up the articles of incorporation, which we signed, and this committee then became secondary to the fundamental bylaws and the election of officers and so on, as a charitable, tax-deductible institution. So we're tax-deductible. If you wish to give us ten thousand dollars, we'd accept it with the greatest of joy, and you could take it off your income tax. If you can make it more, why we'd much appreciate it. [Laughter]

We've had phenomenal success with shows; we haven't any money. We've brought some beautiful work to the area--have produced publications and two portfolios. Bill Turnage came, primarily to work for me, and he had several other things to manage. He acted as the director and really did a fantastic job in waking us up--made a lot of us very mad because he told the truth. You know that usually happens. He's a mover and a shaker, and he did his job of organizing and telling us the truth--analyzing the full situation. And then on Turnage's advice we appointed Fred Parker as the regular executive director. He's a curator and a museum man and an expert in photography, and there were very, very few trained curators, art historians, or gallery persons in the world of photography to draw upon. That's one thing that we now have to stress.

I think that the Princeton center, which David McAlpin has just initiated, will start developing such people. You see, it's not necessary for them to be photographers. The curator of painting or the museum director is not necessarily a painter. But we've had few of these for photographers to call on, and their opinion is usually biased; it can't be anything else. I've tried it; I've run things. But it's just incredibly hard for a photographer to be objective.

Teiser: What is the center that McAlpin's given?

Adams: The Princeton University Art Museum photography center. He's founded a chair of photography. Peter Bunnell is running it. And it's primarily related to the history of photography. He gave one million dollars, which it costs to set up a chair. People never think about a million dollars. What can one do with a million? Well, normally you have to put it in securities, and out of that, you get 50 percent--fifty thousand a year.

That's an irrevocable trust, and that pays Bunnell's salary and the space charges, and operating cost, and a secretary. You can't do very much with fifty thousand a year in a big institutional way. But you can train people who come and work through Princeton in the various departments. Now, of course, the term "museology" is really related to the physical care or the restoration or the analysis of paintings and works of art. A curator is somebody who has an art historian's knowledge in the field, you see, and cares for and controls the prints in relation to this knowledge. The museum director is somebody who just says what's going to be done. The curator, by the way, usually has to prepare and hang the exhibits.

But the director--he has to know a lot, or should know a lot--but he also has the administration and politics and finance on his neck, you see.

Teiser: And your director of the Friends is up to all those things.

Adams: Well--we're very small. He was curator of photography at the Pasadena Museum. Now he could move into a position like this chair at Princeton. I don't think he would like it too much. His ideal would be the curator of photography in some big institution, say the Metropolitan. That would be an objective goal. But here he is running the exhibits, he's running the workshops and the publications. But it's all subject to the approval of committees on the board, which it should be for saving his own neck. We haven't disagreed yet.* But it's very important for the trustees to keep control.

Some directors will say, "Well, I don't want to be subject to anybody. I want to run the whole thing." That's one of the worst things you could let anyone do. Because why not share your mistakes [laughs]--psychologically and otherwise? But we've had a very good board. Liliane De Cock is on the board, for example.

Teiser: Are most of the members on the board photographers?

*We did later. [A.A.]

Adams: Too many. We were practically all photographers at one time. Now we're stretching it more, because again, a complete board of just photographers is biased. And we have some members who just can't see any other work but their own. I mean it's very difficult for an exhibitor to criticize exhibits, because it doesn't look like the kind of photography that they believe in. Well, that's not our function. And Fred Parker, with his very big knowledge of photography, can get us exhibits of the photography of our time. Now, I would say that half the shows that we've had there I don't like, from the personal point of view. But I have no right to pass that judgment. I don't like Rubens, and I don't like Picasso, but I'm very fond of Rouault. So you wouldn't expect me, if I ran a museum, to concentrate on Rouault. I'd have to admit the existence of Picasso. [Interruption]

Well, so the Friends are a growing institution, and of course I want to withdraw when it's reasonable to do so and concentrate on my own work. I think it's terrible for people to stay on and on and on and on in any institution.

Teiser: I imagine that it wouldn't have become a real organization without your leadership, however--

Adams: Well, I think probably I'd have to accept that fact. Not from the point of view of conceit, but because of experience with the Museum of Modern Art and many other things of its type. The Sierra Club--thirty-four years on the board there--I learned something about management at the board level! And then I'm very well known. So you put all these things together on a purely objective level, and of course I would be useful to some degree.

Teiser: What is the geographical area of this group? Is it really national?

Adams: We want to make it national. We've had exhibits from all over. One of the things we wanted to avoid is being a camera club. Camera clubs are really social clubs, like little men's chowder and marching societies [laughter]--and are not interested in photography as an advanced art but more as a hobby. The Photographic Society of America represents the camera club and hobbyist and practically nobody else. It's another world. It's a very difficult thing to explain, but you just go and look at a photographic salon by the pictorial group and you see a totally different thing than when you see a serious, creative, dedicated work.

Teiser: There's a man in San Francisco who I think you must have known, who I think was a photography club man. Francis Brugiere--

Adams: Brugiere. Well now, he was rather unusual. He was quite an artist. But there was no outlet for photographic art, so he did function through the only thing that existed to function in photography--the

Adams: camera club. But he did many things with light--photograms, reflections, abstract things that are really quite extraordinary.

But I don't know enough about him to give you any authentic information. It would be like Ann Brigman, you see, who did some remarkable images which Stieglitz liked. But the only place she could show was at the camera clubs.

Teiser: I rather suspected that Brugiere was better than most.

Adams: Oh yes, he was very much ahead.

Then, I forget the man that ran Camera Craft for so long. He was a nice man, but boy! He had what you call "Kodak taste." He was right down the pictorial line.

The Friends are a going organization, we hope. I think we've accomplished a lot, and now photography is becoming a very big factor in the art world. Scores, even hundreds of college departments, hundreds of workshops--some are bad, some are good, but it's now being recognized.

And a museum will have a photography show. Heretofore, you'd have Stieglitz and Strand and Weston--that would be about it. Then [Eliot] Porter and I got in, and some of the Europeans--Cartier-Bresson, Andre Kertesz, a few others, but it still was always played pretty much on the safe side.

Now they're really showing much younger people. Liliane's had some fine shows. She's got one coming up at the Amon Carter Museum, and I think at the Art Institute in Chicago--I'm not sure. She's had some very good exhibits--at this level of an artist, which is the thing that we have to maintain in photography. It's a very difficult point.

You see, it's up to the photographer to maintain his work at the level of the artist. The painter and the sculptor automatically assume that they do. "I'm a sculptor--I'm in the fine arts." Of course I might be a lousy sculptor, but still, I'm automatically there. A photographer never has quite that conviction. That's one of the reasons--the insecurity--why so many photographers talk so much. You know, to justify their own work and try to mystically explain the inner unmeanings.

Teiser: I know the Friends of Photography is not like the Eastman House, but--

Adams: The Friends of The Bancroft Library would be people who'd go out to raise money for the library. Well, we might have the "Friends of the Friends of Photography" some day. It's what we need. [Laughter] But there are friends of almost anything--friends of the sea otter. It's a vague term--it means supporters.

Teiser: Well, do I remember that the Eastman House group has published and shown exhibits and sent exhibits around--

Adams: It's not got a big membership. It is a nonprofit membership institution. But they never went out after many members. They were very generous to their members. We were too generous in giving each of ours the portfolios. We had about twelve thousand dollars tied up in portfolios that haven't sold yet. Every member got a free copy. And they're beautifully reproduced.

But you'll always find that there's something wrong with whatever you do. "Why did you make this selection?" "I didn't think that picture was any good." And the next person will say, "Well, I think that's one of the best things in it." When I did my Portfolio V it was extraordinary because there were two or three images which most people liked. But every one was liked by a number of people. And that's kind of lucky, because sometimes there'll be one or two that will be by-passed entirely.

Museums and Critics

Teiser: To go back in time--to other exhibits of photographs--in 1931 you had an exhibit at the Smithsonian Institution called "Pictorial Photographs of the Sierra Nevada Mountains"--

Adams: Everything is wrong: "pictorial" is wrong, "Sierra Nevada" is wrong, "Mountains" is wrong. [Laughs] We all use that, but Francis Farquhar--oh, he used to go wild over that.

Teiser: But that was what they called it.

Adams: Well, that was just like the name they gave Parmelian Prints, I guess.

Teiser: Was that your first major exhibit?

Adams: I wouldn't consider the Smithsonian at that time as having any status as an exhibit place. They showed curiosities and scenes and such things, but I don't think they had museum status. It even doesn't have what you'd call really museum status, although of late it's getting there.

Teiser: How did they happen to know about you?

Adams: Well, word of mouth. Francis Farquhar, somebody. Bradford Washburn of course had shown a lot of his Mount McKinley pictures. But the Smithsonian has always related more or less to science,

Adams: travel, invention. And boy, when Beaumont [Newhall] and I went there, they had their exhibit of photographs of early Fox Talbots [photographs by William Henry Fox Talbot] up in the top floor under the skylight, completely unprotected. And these things were literally fading. And I blew my top. I said, "Beaumont, can't you do something about it?" He said, "You don't understand the museum world. I could no more go down there and criticize this curator!" He said, "You could," you see, because I wasn't in the museum world. And I wrote a very strong letter, first thing. I said, "As a photographer, subjecting these invaluable photographs, some of the most important things ever done--subjecting them to this unfiltered light is--well, it's incomprehensible." There were other people who were upset too. They did finally cover these cases with a yellow glass filter. Still it was a poor job.

So then I went to Dearborn to see the Ford collection [at the Henry Ford Museum] of [William Henry] Jackson photographs. We were trying to get something for the "Brady and the American Frontier" exhibit. They had fourteen thousand glass plates in a loft of one of their big buildings, and the temperature was about 110°. Fortunately, it was dry. But collodion won't take too much temperature. And I blew my top there. I told this man, I said, "I think keeping these plates here is absolutely disastrous. I'm no chemist, but this heat is such a hazard"--the sun beating on the roof. He said, "I think we know what we're doing, Mr. Adams." I said, "Well, I guess perhaps you don't. I would say this could lead to a most serious deterioration." Well, I wrote a letter to Henry Ford II about it. But you see, I'm not in the museum world; I was clear. I could do this. But if Beaumont [Newhall] had done that, he'd have been immediately blacklisted in the profession. Because you never criticize another curator--like a doctor, you see. A doctor can't go and say anything negative about any other doctor--unless he is a downright fake. But even then you have to be very careful.

And when one doctor criticizes another, it's always by innuendo. They say, "Well, some people will go to anybody." Never really say that Dr. Jones is an impostor!

But photographers--among the good ones--as soon as a photographer knows another one is sincere, he usually is very supportive. But he also can get hideously jealous. That happens in music too; I suppose all the arts. I know some very unfortunate high-level jealousy among some of the very top people. And it's purely psychological, because they have nothing to be jealous about.

A lot of people are jealous of me because of my apparent success in selling prints. I'm not conservative in spirit. My work is fairly "set"--you know, it's me, and it belongs to another

Adams: and earlier period. The criticism I get quite often is that--well, I'm dead, I'm finished. I've had people tell me that to my face. "Why don't you go and retire. You're through; you haven't done anything new for years." I say, "You're perfectly right. But I may." [Laughter]

It's very hard to judge things such as methods of photography or any art at its own level. Another thing that's been very serious in the museum world is that the dealer world has been one of the extraordinary merchandising machines of the times. These people like Warhol and others will have an exhibit, and an agent will take them on. Now, the agent promotes them, and within a short time this man is the "greatest artist of our time." And people are like sheep. They get a page in Time. You'll see very often Newsweek and Time will have the same story. Now, that comes right out of the publicity offices. It's all very well engineered. And they like to come out at the same time because one doesn't want to follow the other.

Then I've heard a museum man say, "Well, I was considering Harry, but you know, he's about six months passé now." [Laughter] It's the truth. And I said to one curator, "Well, does that in any way influence Harry's quality?" He said, "No, but he's just dead. He's not up with the times, he's not with it." Well, in six months time, you know--

Goya is still with it. [Laughter] And El Greco is still with it. And I'd say that the early period of Picasso is to me extremely moving. And I never can accept the later period. I think he had his tongue in cheek in a lot of it, and I know a lot of contemporary art which is far more abstract and far out than Picasso, which moves me deeply. But again, not being a museum man, not being a trained art historian, I have no right to say that as anything more than a strictly personal reaction.

Some say, "I don't like Joe, and I think Harry's a good guy, and what's the matter with Jim?" It has nothing to do with the real value of the people as artists. It's just their own reaction. And the critics! We are trying to train now in photography knowledgeable critics, because there are very few of them--and many are needed. A painter cannot criticize a photograph.

Teiser: There's Mrs. Mann?

Adams: Oh yes, Marjorie Mann. Well, she's a psychological case. She writes sometimes brilliantly, but she has just decided that something's wrong in photography and she's going to set it right. I would say that Mann is inclined to be rather brutal and inconsiderate. When she's writing about something she knows, she's fine, but she immediately tied onto the Friends of Photography as being nothing

Adams: but an old fogey organization perpetuating the West Coast school. Well, she came to the first opening. We told her what we were going to do. And immediately she decides we show only the classics.

Well, then she hit a couple of other shows that were of somewhat conservative type, and she missed all the ones that were highly contemporary and experimental. I think she missed the platinum show, which was history, and she missed the--oh gosh, I just can't begin to tell you. So she has a total misconception. Now, her influence is considerable. So before Fred Parker knew about us, he had that impression through her writing. And then when he came and looked at the series of exhibits that we had, he said, "I want to apologize for my previous opinion. Why didn't somebody tell me?"

We had Van Deren Coke class work from the University of New Mexico. We had the Institute of Design, we had Todd Walker--we went all over the map; a very fine cross section of what's going on in photography. We had the Visual Dialogue show, with photo sculpture--things in the round and in plastic. So one of our big problems is to show to the world that we have a very catholic approach.

But you see if you can be a belligerent critic, if you can be a showoff, if you can make everybody feel that you're right out there crusading--you can get a lot of attention.

Her [Mann's] own photographs are simply terrible--the weakest things. I think she never should photograph. A critic should be absolutely objective. Most art critics are not painters--they've studied art, they're art historians. Beaumont is a superb critic in photography, about the only one that really exists.

Teiser: Does he write that analytically?

Adams: Well, I'm trying to get him to do it, but Beaumont's a rather mild, kindly person, and he's interested in the history of photography, and for him there's no difference between the past and the present. It's a continuous flow. He can pick up from my work things that happened a hundred years ago and vice versa. Not that we're imitating, but it's just a broad approach to the world, you see.

Now, a typical happening is--somebody wrote me a letter: "How did Stieglitz get these rich qualities?" I wrote a letter back saying as best I could that the chances were that the rich qualities he saw were a psychological effect due to his wonderful sense of values. And I sent that letter on to Beaumont, and he was able to say, well, the values are a little extreme in some cases, in lantern slides, for example, because Stieglitz intensified them with mercury. But mercury isn't permanent. He didn't know it at the time, so all those slides are gone.

Adams: I have some intensified in mercury and chromium that have gone too! It isn't permanent. It's very complex. You add mercuric salts to the silver, and the result is a kind of mutual deterioration. The negative just turns a ghastly yellow, and I don't know of any way to get it back.

Teiser: I was impressed that someone writing so seriously in a popular photographic magazine would get as much space as Mrs. Mann has.

Adams: Well, she approached it as a profession.

There's [A.D.] Coleman, who writes for the New York Times, and he seems pretty erudite. I think he's been pretty good.

Now, Jacob Deschin, who wrote for the [New York] Times first, is a very nice man, but he really knows nothing about photography. He really started writing about photo products. And people used to look at that column like we look at Herb Caen, and believe it, you know. A lot of people never enjoy a concert until they've read the paper the next morning. But of course Deschin wasn't really in that critical class at all.

There's a very interesting story about Beaumont. You see, Nancy [Newhall] designed my big show in San Francisco [the 1963 exhibit at the de Young Museum]. And one of the photographic magazines asked would Beaumont write a criticism of it. And Beaumont, being a professional and not having enough money, said, "Yes, but it must be professional." They said, "We'll pay your way to San Francisco as an honorarium." Which is all right. He said, "Now, there are my wife and one of my close friends there who could do it." They said, "No, no, we trust you." So he came out.

Well, Beaumont wrote a perfectly beautiful analysis of the show and of my different periods of work and was very objective. He took the text to the editor, and the editor said, "Gee, this is pretty good writing, but can't you find anything wrong with it?" And Beaumont said, "Well, the function of criticism is not to find something wrong. It's to interpret. But," he said, "no, I can't find anything wrong with it. There's a few prints--quite a few prints that I wouldn't have put in myself, but there's nothing wrong with it in the total sense."

But then, it makes people feel very superior to have somebody say, "Well, it's obvious that Paul Strand has done some very bad things," or "This picture doesn't hold a candle to that"--you know, some needling remarks. It's like the old Roman arena and the gladiators, I guess. They just like to see people taken apart. And most of the photographic criticism has been that way.

Adams: The art criticism has been much better because the critics have been much more erudite--and the same with music. There was a famous music critic at the Examiner many, many years ago. Or maybe it was the Chronicle. I think it was Rosenthal who played, and after the intermission the manager came out and said there had been a mistake in the program, and Mr. Rosenthal is not going to play this, he's going to play this and this and this. What do you think--the next morning in the newspaper here's a glowing description of what Mr. Rosenthal didn't play. And the critic heard him. I saw him there. Then he left to write and meet the deadline. He maybe, after all, had heard Rosenthal do the "Fantasy" of Liszt, you know, or the "Don Juan Suite," or whatever was on the program, so he just wrote about them.

Imagine the embarrassment of writing a critique about something that wasn't played. [Laughs] He was a very kindly man, and he was terribly embarrassed. The next week he wrote a letter of apology and explained why--that he'd heard Rosenthal many times and knew how he would perform. But still, it was an inexcusable breach. But everybody thought it was a good joke. [Laughter]

[End Tape 12, Side 1]

[Begin Tape 12, Side 2]

Teiser: To get back to your exhibits--the one you would perhaps consider your first real exhibit. It was a one-man show in 1932 at the de Young. It was before the f/64 show.

Adams: I think that would be fairly important. [Lloyd] Rollins, the director, was way ahead of his time; he did a great service to photography in the fact that he did show it. He showed Weston, he showed Brett [Weston], and he showed me, and he showed others, and he showed f/64, and he had the museum trustees down on him for wasting space on photographs.

The whole Art Association in San Francisco has had a vendetta against photography as long as I can remember. They resent any space [used for it] because to them photography is not art. And my dearest friends, people like Colonel [C.E.S.] Wood and Sara Bard Field, would take me aside: "You could go anywhere in music. Why did you choose photography? The camera cannot express the human soul."

I told Stieglitz that. Stieglitz said, "Oh, so?" [Laughs] I mean, making this romantic failure, I guess you'd call it, to see what you saw and feel it was just as spiritual an accomplishment as what a painter could do. But to them (they were a generation before me, you see), it was a mechanical process. You click and then you

Adams: develop and then you print, that's it. But they don't realize all the magical visualization and controls that go into it. And this is terribly important. [Interruption]

Teiser: Your show at the de Young, then, in '32, was of prints that you had recently made?

Adams: Yes, most of the early better things.

You see, I have a big problem now, that I'm probably the most disorganized photographer that ever lived, and probably the one who has the greatest number of things to fight with and combat, in items and early pictures. And for my show in San Francisco that's coming up, I have to go out to that darkroom and I have to start in from the beginning.

Proper Disposition of Photographs

Adams: I have hundreds of prints, and twenty-five, thirty thousand negatives, and of course some are useless and some are of purely historic value. I should take my early pictures of Yosemite--negatives--and give them to some historical [organization], like the Yosemite Natural History Association, because there's thousands of pictures that are just "Ridge No. 3," "Peak X," etc. Well, they'd take them and look at them over a period of forty or fifty years--watch for the changes. That's very important scientifically.

And I've had a little struggle over what to do in relation to The Bancroft [Library] because--where do the prints go? Well, in fact we're having a discussion with some good friends this summer about what's going to happen to this place.

Teiser: The Bancroft has new space being planned--

Adams: Well, if any architect at all knows his salt, he would make purely archival conditions for collections. But the point is, The Bancroft is historical and I sent up all the Sierra Club papers-- I just sent up all kinds of things. Now, when you come to a photographic collection of prints, if it's purely art items it should go to a different place, I think--an art repository. The Bancroft have a lot of early California things, but that's not necessarily art.

Now, Edward Weston's pictures were given to the library at Santa Cruz by a friend, anonymously. He's given eight hundred of them, and this could be the nucleus of a photographic collection.

Adams: But there were forty prints of Edward Weston over at Monterey Peninsula College, and nobody recognized what they had. They were in drawers without slipsheets on them, and the students would take them out and prop them up carelessly. Finally we got terribly sore over that and we had them all overmatted, and really--when we told them they were worth five hundred dollars apiece on the market, they immediately made a flip. They are very nice people, but they were absolutely opaque to the quality of these prints.

And this is the kind of thing that we really have to consider in disposition of creative work.

Now, the pictures I have of Yosemite and of the California of my time, and so on--they are history. If they're fine photographs, that's good too. But I have many photographs that have nothing to do with the subjects of history. How is The Bancroft going to handle it? It belongs in a different category. It belongs with a photography collection in a photography department. And once you give a thing, you have no control over it.

The Huntington Library has a magnificent collection of Edward Weston photographs, and I think they're taking care of it. But they are isolated.

Teiser: They have a very good group of yours, too.

Adams: Yes, I've heard that. I don't know. But in Edward Weston's [case], some donor gave five hundred prints I think valued at twelve dollars apiece. Paid Edward that, and Edward made six thousand dollars. These photographs are now worth a fortune--forty thousand dollars. They're scarce as hen's teeth. An original good condition Weston print is worth at least eight hundred dollars today.

Well, now, I'm getting two hundred dollars for the 16 by 20s.* If I were to die tomorrow, those things would immediately go to one thousand dollars or more, like Stieglitz. You couldn't buy a Stieglitz today. I have one that should come back pretty soon. It's loaned out on a museum tour. I insured it for six thousand dollars. I know two people who'd give me ten thousand dollars for that picture. And that is ridiculous, you see, because Stieglitz is dead. There's only two of these in existence. So it has nothing to do with the art value. So what do I do? Do I capitalize on these things?

*Five hundred dollars after July 1974. [A.A.]

Financial Practicalities

Adams: There's a terrible thing that happened with the estate of David Smith, the sculptor; the IRS has come in to his studio, with all these things, and has put a death tax on the dealer's value, which goes into millions. And the estate can't possibly pay it.

And what happened with Stieglitz—he never took a cent out of the gallery. And Marin and [Arthur] Dove and O'Keeffe, they'd bring their paintings and leave them there—a good, safe depository. Well, he died, and in comes the IRS, and they say, "Oh, there's an O'Keeffe—twelve thousand dollars," which is what it would have sold for. And here were a hundred Marins at twelve thousand dollars apiece, and so on. And they went up into fantastic sums. The estate said, "We don't own these. It was just that they were on consignment." "Well, show us the papers." Well, there were no papers. He never gave anybody a receipt; they were all "family." So it took the combined effort of two top New York lawyers and McAlpin and somebody else to go down to Washington and state the situation, that these paintings belonged to the artists.

So you see you're in a very difficult situation in any artistic value. On the other hand, I could take one of my two-hundred-dollar prints and give it to the Institute of Foreign Studies for an auction, and the only thing is that they can't sell it for less than the going price, because that wouldn't be fair to the clients. But I want nothing for it at all. I give it to them. All I can take off of my income tax is ten dollars.

Teiser: Why?

Adams: Because the artist can only take off his material costs. That's the new reading. Now you can buy that print for ten dollars from me and give it to the Institute. Then its value is two hundred dollars, and you can take that off your income tax.

Teiser: You mentioned the other day that prints were not, earlier, collected or bought. When did it start?

Adams: No. Well, Stieglitz sold a few. God knows how few. Strand--

Teiser: How did Strand make a living?

Adams: Strand inherited quite a fortune. Stieglitz had a very nice living. Julia Margaret Cameron had a nice living. Edward Weston was broke all his life, except when he was a portrait photographer in Glendale; then he was doing very well. Then he threw that all over—it wasn't creative. And he nearly starved to death on a couple of occasions.

Teiser: Could Edward Weston have sold more prints?

Adams: Edward Weston needed a manager. If Edward Weston had had a really sympathetic, good manager, Edward could have done very well, because he was a superb photographer. But he just philosophically-- he just pulled away from all that. You couldn't talk to Edward about anything. I used to plead with him on insurance. I used to plead with him on making out a will, for the sake of his family. [He'd say,] "Oh, I'm not interested."

Robinson Jeffers came here in 1924 or before and got all that land at Carmel Point. And finally friends used to say, "Well, look, Robin--" Of course, he had an income too, you see. Taxes were getting a little high. They'd say, "You have to remember, this land is tremendously valuable and you ought to do something about it or your children are going to have tax trouble." Jeffers would say, "Oh, they'll have to take care of themselves. I can't be bothered." Well, when he died the property was worth over a million dollars--and the death tax duties [were so high that] within a year they didn't have any money at all. They had to immediately start borrowing, selling, subdividing. That whole point should have been a Robinson Jeffers memorial area, you see. And he could have very easily made a corporation--a trust--and put everything in it. There'd be some taxes, but so little!

So as I say, many of the greatest creative photographers have had private incomes and were really amateurs. Eliot Porter is very well off. I know of several others.

Original Prints

Teiser: In Stieglitz's time, then, very few prints were sold?

Adams: Oh, very few photographs. He just put impossible [prices on them]-- thousand dollars, seven hundred fifty; Strand, five hundred. Mrs. Liebman would buy a Strand. But the prints were sold. Most of it was done in portrait commissions, or sold [for reproduction in] books. But the actual purchase of a print as an art was very little known.

Teiser: When did people start buying them?

Adams: I'd say it really started probably before the 1929 crash. Then after the Great Depression, and shows were given in galleries, people started acquiring prints. But never at more than a personal level. And then, you see, as the galleries developed, people got aware of the fact that a print had value.

Adams: Now, my Portfolio V is strictly limited to one hundred copies for sale, and everything's destroyed--negatives and all other prints. And the collector will say, "You don't number this edition of other prints." I say, "No." To me a photograph can be reproduced a thousand times, but it has no value to a collector, because he's just buying something anybody else can have. Etchers have done that. Weston did it. He used to have, say, fifty prints, so he'd make a few prints. They might be number 5/50. Well, he very seldom sold more than five or six, except for just a handful [of photographs]. And I'd say the same thing. I can think of ten or twelve photographs which have sold very considerable quantities, way beyond any normal edition. And the rest--seven, five, ten, none. So in theory I should set a limit; that I will make no more than fifty prints, a hundred prints. And then every one bears the number of the print and the edition.

Teiser: Then after you make those, you should discard the negative?

Adams: I should discard the negative. Now, fundamentally that is wrong, but also, I couldn't charge what I charge if I didn't. In other words--well, suppose you had a photograph you knew was going to sell a thousand copies, and you put those out, say, for fifteen dollars, the edition. You get fifteen thousand dollars, which is more than you'd get from all but a few photographs. We've sold nearly twenty-five thousand dollars of special edition prints in Yosemite.

Teiser: But how long does it take you to make a thousand prints?

Adams: Well, that's another point. I'm one of the few photographers that has a plant where we can do it well. You should see the darkroom of most of the photographers! Absolute little holes in the wall. Wynn Bullock's darkroom looks like a back room in a basement somewhere. Imogen Cunningham's darkroom is a shambles. Eliot Porter's is very fine. He does color work, and he has a lot of money to put in it. Weston's darkroom was one-quarter the size of this alcove, and the only thing he had of any value was a dry mounting press. He put the negative in a printing frame and turned on a light overhead to make a print--no enlarging!! I mean, almost a mannerism of simplicity. But I have a room in which I make my big prints. I have some beautiful electronic equipment. I've got a new digital clock. I've got a timer, a metronome, which is regulated in intervals by voltage change, so I'm always getting the right amount of light. When I'm counting ten seconds, or ten units of light, if the voltage drops, the interval will increase. Those things are very simple. The average color processing darkroom costs ten times what I've got.

Teiser: Would you make a thousand prints? Could you stand it?

Adams: I've made two hundred 16 by 20s in one day, from one or two negatives.

Teiser: My word!

Adams: Oh yes. I can make special edition prints. I can do 250 a day without any trouble at all. Well, with assistance. I have to have somebody assisting with fixing and washing. If I had to go through the whole thing alone, it would be too much. But if I sign the prints, I have to make them.

I'm going to get Ted Organ to help out with special editions. He's a fine photographer. I'll turn him loose. Now, if all his prints are what I approve of, I'll initial them. And most of the painters--great painters--always had assistants. Diego Rivera's murals--I mean, many of these--oh, probably 70 percent--was done by somebody else, but of course under his direction. It's a ticklish thing. A negative can give you more reproductions than any other medium. A copper plate will wear out, a lithograph stone will wear out, but a film will last forever because there's nothing going through it but light.

Teiser: Who are the people who buy prints?

Adams: Well, you have a few individuals who just like a photograph, and want it. Then you have a few people that like a big photograph in the house. I make these big ones, you know, 30 by 40. They want them "over a mantel." Then there are business firms that want to use big photographs for general decor. There is a law firm [in Los Angeles] that has eighty-plus prints, my biggest single installation.

Teiser: Where is this?

Adams: McElviny & Myers, the big law firm. Then the Fremont Indemnity has three floors of prints. IBM has got thirty-two pictures in the roomssin the Homestead at San Jose. They're all fine prints. You give them a discount when they say they want to buy fifty prints. They don't pay a gallery rate, obviously. I make ten of each, twelve of each--ten of each in this case. I have another job coming up for them.

Then there are simply collectors. Some do it for financial reasons. I know one man that's bought something like ten thousand dollars worth of photographs and sold them for forty thousand dollars--just like you do paintings or stocks and bonds!

Teiser: That's a speculator. But are there any great private collections of photographs in the country?

- Adams: Oh yes, there are some very good ones. Lane has got the biggest one, William Lane in Luninberg, Massachusetts. He has a tremendous collection--Sheeler's and Weston's and mine. Witkin and Harry Lunn are the best men in the gallery world, and they have people that are buying. I think most important collections are in museums. People buy and give to museums.
- Teiser: I was thinking for instance the way people put together book collections.
- Adams: [David] McAlpin had a very fine collection. But he's giving it away--to the Museum of Modern Art, the Metropolitan, and to Princeton. He's probably our great patron--he's the one that really started [buying]. When I had that show at Stieglitz's, he came in, and he wanted the "White Gravestone." He asked, "What is it?" Stieglitz said, "Seven hundred fifty dollars." McAlpin sort of blinks, because even that was high. But Stieglitz said, "If you get that, you can have this one, this one, and this one." That was the beginning. So McAlpin has bought untold thousands of dollars of prints--the most generous [buyer]. Of course, he's one of the Rockefellers on William Rockefeller's side, and he must have a tremendous amount of money, but he used it in the most marvelous ways--supporting music, the Philharmonic, the opera, the Princeton choral society, the Alexander Hamilton papers; different art museums. Oh gosh, there's no end to his munificence. And he lives in a nice house in Princeton, very unostentatious. (All these people that really do these fine things never live [lavishly.]) The Lands have a very fine photographic collection. They're thinking of what they're going to do with it.
- Teiser: I think of the many people who collect fine editions of books, whether they ever read them or not. And very often they go to libraries or institutions.
- Adams: Well, the fine book--a collection of fine printing, and the buying of books--well, it's a little closer to photography than is the collection of paintings. Because, first the original cost is less. Albert Bender used to buy any number of fine press books. But then you're talking about ten, twenty dollars, a relatively low field. Well, somebody comes along with a very expensive book, like the Kelmscott Chaucer. A dealer in New York called Bender up one day--this is back in the thirties--and said, "I have a Kelmscott Chaucer for \$3200." Bender says, "Hold it. I'll let you know today." What does he do? He picks up the phone. "Rosalie Stern, top of the morning to you. We can get a Kelmscott Chaucer for Mills for \$3200. I'll put in five hundred dollars." [Mrs. Stern says,] "Put me down for five hundred dollars, Albert." He writes this down, calls up Cora Koshland, "Top of the morning to you, Cora. How's the sunshine off Washington Street?" "Well," she says, "it's very

Adams: gray, Albert. But I know you're after something. What is it?" He says, "Well, the Kelmscott Chaucer for Mills College--we can get it for \$3200. I've put in five hundred dollars, Rosalie's put in five hundred dollars." [She says,] "Put me down for \$750." Well, you know, in about two hours time he had all the money raised for this thing, and he calls up New York, and he says, "Send it out. I'll send my check today." That's the way Albert Bender operated, you see. And that Kelmscott Chaucer, one of the rarest books in the world, is in the Mills College Library!

Same thing for Stanford. But that's like buying a Rembrandt, you see. Virginia and I are a little bit disappointed in each other because I had most of the keepsakes of the Roxburghe Club and we gave them to somebody, some institution. And now I understand they're worth \$2500. [Laughs] We thought they were just a lot of old folders and things. They were Grabhorn and Nash, and Jonck & Seeger and Lawton Kennedy--fine examples of printing. And we had the greatest printers out here; there were a few in the East, but nothing as extraordinary.

So what are values? As a creative artist, I shouldn't be worrying about that. I should sell my prints for the most I can get for them and do the best prints I can, and then let the historians and the dealers reap the harvest.

Teiser: But as the owner of negatives, you must, mustn't you?

Adams: Well, the negatives have no meaning unless I print them. Now, the great architectural picture I have--Piranesi. Now, that is an original Piranesi. It was given to us by Robert Farquhar, the architect. The Italian state made a special edition of all of his remaining engravings and ruined them; they didn't give them to the right technician. They didn't look like the originals; they weren't the real thing. This is the maddening thing, because with some superb technician and artist, they could have done it. But somebody sold them on the idea, and didn't do a good job.

Well, now, I think I'm missing out on a couple of things you asked me.

One-Man Shows

Harroun: We were talking about the '32 exhibit.

Teiser: That's right. At the de Young. What I read about it recently was that, in it, you said that you had changed your method and your view of photography, and these were new prints that you had made, not the kind that you had made previous to that.

Adams: The criticism could be that the new prints of many of the old negatives were poor because the negatives weren't made for that kind of technique, for that kind of printing. And it was interesting, in my big show in the de Young in 1963, there were two small rooms of early originals made before 1930, and most of those had gone to Lane; he owns those, and they're some day going to museums.

Teiser: But in the 1932 show--

Adams: As I say, most of those that were made from negatives that I had before 1930 were probably on Dassonville papers, and I can't remember that show as to whether the prints were all up-to-date.

I can't remember much about other shows. I had one at the University of California [in 1939]. When I made the prints for it, I thought I'd do a new thing; I made them very rich and dark. Everybody said, "Your prints are awfully dark." I said, "No, I want to get this richness." A year later, I saw them, and I wondered how in the world I had ever made such prints! They were terribly dark, they were heavy, they were over-toned. But I was going through a "thing," as they call it, in which these "qualities" symbolized something that I felt. And they're very depressing. I got a lot of bad reviews, which they deserved. But it's a fact that the photographer shouldn't judge his own work and shouldn't plan his shows, because he's too close to them.

Teiser: You had your own gallery in San Francisco for about a year, was it?

Adams: That was a headache.

Teiser: Was it? You gave some shows, though, that were pretty good, weren't they?

Adams: I had a Zorach show--painting, sculpture. I had a Bufano show--sculpture. I had f/64. I had my own. I had Weston. Virginia probably has the list. It was all so unreal and impractical. But I never forget what the manager at the Wittell building told me when I had to close up. He said, "You can put me down for this--you're the only artist I ever knew that ever paid all your bills right on time." [Laughs] I didn't say I used to go and beg advances from Albert Bender. [Laughter]

Now, there's many other shows. The first show in New York was at Alma Reed's [Delphic Studios] in 1933. And that was the kind of a person who made you put up cash money to pay for the announcement. I sold about six prints. Stieglitz was very mad at me. But my prime story is, in 1933--the first trip east--we went to Yale, and I had a letter to Dean Meeks, who was the head of the art department. I showed him the photographs. He was very excited, called in a

Adams: curator. Looked at them all over again, and when he came to the one I have of leaves at Mills College, he said, "Mr. Adams, I find this absolutely extraordinary. What is it?" I said, "Well, it's a leaf pattern." "But," he says, "What is it?" I said, "What do you mean, what is it?" "Is it a tapestry? Is it an engraving?" I said, "It's a picture from nature." And [at first] he didn't understand.

Well, then I had a show there, I think in '33, '34, '35,* at Yale, and that was pretty good. That created a lot of excitement. That was probably the first time that photographs of this type ever came to that part of the country. But Dean Meeks was so unknowledgeable in photography that he couldn't believe that this was a photograph from nature.

Teiser: Had many pictures of that sort been taken by then?

Adams: [Albert] Renger-Patzsch was beginning it in Europe, and Paul Strand had done some. Edward Weston had done some. But nothing that I know of of that particular approach.

The Creative Intention

Adams: Is it Wordsworth or Gray who made the poetic statement, "How many a rustic Milton may have passed this way"?** All of the ability, but none of the realization. And that realization depends so much on luck, fortuitous--oh my, it's really a profound thing.

But a person like Newhall, who's a great researcher, will find that maybe people in 1860 did things like that. The first daguerreotype was a still life. I think there's several of Fox Talbot that are of little natural things. But again, it was just the miracle of the process there. "I'm going to photograph this." You imagine yourself getting suddenly a new process, "My gosh, I can do this." And you look around, and you look at that table, and you go "click," you know. Then of course, in history, somebody begins to build that up and read in "significance." It's very important.

So probably one of the main criteria to judge a great photograph is, was there a creative intention? And lots of these historical photographs have absolutely no creative intention at all other than being a very good record of the scene. Perfectly honest and capable. But the creative intention is really back of the element of art. A great deal of my early work, to my best

*In 1936.

**"Some mute inglorious Milton here may rest" (Thomas Gray's "Elegy")

Adams: knowledge and belief, had really no creative intention except to record a lot of beautiful things I saw. But then once in a while--this is talking now of the early twenties--every once in a while something would appear before me in which I added the other dimension. I don't know if I'm making sense. It's a very difficult thing to discuss, because the dividing line is so thin between the unconscious and the conscious thing. The difference is between creativity and observation.

Teiser: When you had these early exhibits, did you make selections arbitrarily for them? Were they your choices?

Adams: Well, I'd talk to Virginia about it, and lay them out in the room, and the museum director would come over and [we'd] give him a drink and he'd look at them. And he'd say, "Sure, that's fine, but maybe you could use this one better here," and that was it. It was very naïve, the whole thing.

Teiser : Were they big exhibits?

Adams: Never very big, no; and very small prints--five by seven, or eight by ten.

Teiser: I mean, were there a very large number of prints?

Adams: No, thirty or forty.

Exhibit Prints and Archival Factors

Teiser: Were you making prints smaller in size then, than you do--?

Adams: I did mostly contact printing.

Teiser: Eight by tens?

Adams: Yes, and less. And if I enlarged them, I very seldom enlarged more than that. I had an eight by ten darkroom; then I got an eleven by fourteen darkroom; then I got the sixteen by twenty darkroom. Then I got a forty by seventy darkroom! [Laughter]

But, as Land points out, the basic fact of the big print--it's a conceptual thing. I mean, the print is done for a situation of viewing. You just don't go through the files and say, "Gee, this is a nice negative. I'll make a big print of it." I've been guilty of that too. But you have to be sure that you're making a picture which will stand a big enlargement. I've seen many pictures which

Adams: would be twenty by thirty feet in certain architectural situations. But by the time you get to that, the photographic quality is so bad that everybody has to be roped off thirty feet away. [Laughter] You see, the angle subtended from the point of view is what controls your sense of definition and of grain!

I was so mad at The Family of Man, the exhibit and the Steichen book, that they wanted my negative of Mount Williamson. And I said, "I cannot send you a negative. I just can't let this out to anybody. I'll make it here." They said, "Can't afford that. We'll make a copy from the print in the museum." I thought there were good people in New York. Well, by gosh, they made a terrible copy, and then when they cut the prints, they trimmed off so the sections didn't match. There was an inch lost between each one. And here was this thing on display!

And you know what the publicity picture was? A little girl was trying to span one of the big rocks in the foreground,* and that's publicity! That's the kind of thing that Steichen would do. The print quality, the whole feeling of this image was debased. The Family of Man is, I think I told you once before, one of the worst catastrophes that ever happened to creative photography. Terribly important from the social point of view, but hideous in its effect on the whole idea of what is creative image quality and so on.

Teiser: Also sentimental.

Adams: Stickily sentimental. Advertising level sentimentality. So I would say now, again, I think that was a catastrophe. Dr. Land had the same idea. He said it was a very interesting show if you wanted to get sentimental about the human kind, but it didn't do any good for photography. He's an extremely astute man.

But am I unpopular in many circles for that opinion! Because 50 percent of the contemporary photographers sort of fall back on that as the bible of justification for what they do.

Teiser: It seemed to me to reduce man to about the level of a guinea pig.

Adams: Well, that's a long story. I don't think I should get into it, except to express my antagonism of the whole idea, and I'm sorry I was even included.

*In the museum exhibit, "The Family of Man." This photograph is reproduced on p. 202 of the volume, The Family of Man. New York: Museum of Modern Art, 1955.

Teiser: I wondered why--

Adams: Well, one wants to cooperate.

Teiser: You didn't know what it was going to be.

Adams: No; they wanted the picture. But I don't like to send my negatives out and have something happen to them.

I know a man in San Francisco, Irwin Welcher at General Graphic, I can trust him. He'd do the best he could. But it won't be my print. It' can't be; he doesn't have the same equipment and the same point of view. But it will be a decent, craftsmanlike job, and it will be accurate.

Teiser: He once told me that he handled your prints the way that was as close as he could get to yours.

Adams: He did some for the visitors' center at Yosemite, and of course, he has to use condenser enlargers, and that doesn't give the quality of my negative. I have to use diffused light. But maybe there isn't a strong enough diffused light to do it. But I can't criticize him, because he's a very fine craftsman--and I trust him. If the Museum of Modern Art had said, "Send the negative to Welcher," I would have sent it right up. I wouldn't have worried at all. I might not get a print that I'd really like, from the creative point of view for myself, but at least it would be technically clean. It wouldn't be overlapped; it wouldn't be all full of wrinkles.

You know, these commercial photography processors use this single weight mural paper, and they sell it by the square inch. And you cannot process single weight paper properly. I mean, if you put it through all the necessary washing solutions, it won't stand it. It'll crack and wrinkle.

Most of these people make blowups for an occasion. If you had a technical exhibit to last for six months, well, they'd make a great big blowup; after that it goes out in the junk pile. But all my prints are supposed to last! That one of Half Dome was made in '63, and it's going to last until 2063. I don't see why not. All prints go through selenium toner.

Teiser: The mounting board that you use is chemically inert, isn't it?

Adams: Well, it should be, but of course most everything is done with dry mounting tissue, so I'm not so much worried about it--except the edges, if it's a bad board. We use Strathmore and a few other things, now the Schoeller board. They have their problems. It's very difficult. I'm using the Schoeller board now and get it direct from Europe, and it's quite fine; it is a five-ply rag paper.

Adams: Now, Strathmore illustration board is one-ply on each side of a pulp core. Well, the pulp core is the one that may have the destructive effluvia or emission. Now, if you cut a mat out of that, then the edges of the overmat, you see, are not very far from the edge of the print. So under humid conditions, the sulphur can migrate. But the Strathmore drawing board is fine.

On the other hand, if a print has really been fixed in two hypos and toned in selenium, it will resist that. So I say my work is done on a practical archival basis. I can't guarantee it's going to last for three thousand years, and I don't think you could do that with anything. I could do it better than I do it--fix in two regular hypos and take each print and hang it up to dry and mount it with a big wide margin, under an overmat of super rag, and all that. What's the use. That would exceed all of the archival procedures in the whole history of art. [Laughter] I don't see the sense of it.

[End Tape 12, Side 2]

Printing Earlier Photographers' Negatives

[Interview XI -- 4 June 1972]
[Begin Tape 13, Side 1]

Teiser: Mrs. Adams was just mentioning your printing the Brady negatives--the difficulties in handling them.

Adams: What happened was I was working with the Newhalls in the Museum of Modern Art. We thought up an exhibit called "Brady and the American Frontier." Of course, at that time, Beaumont hadn't done all the research, but he had a pretty good idea that Brady never made a picture himself but directed his associates. Well, as for the entire exhibition, we looked all around, and I traveled east and west; I stopped off at places like the Ford collection [in the Henry Ford Museum, Dearborn, Michigan] of Jackson's photographs. I found quite a few things. Francis Farquhar had some fine things. We got a very good collection together.

Then it seemed, if my chronology is right, there'd been a big gift to the National Archives of about five thousand Brady negatives. And Beaumont was asked to come and evaluate them. So, what a wonderful chance--we went together, and we looked through them. That's a lot of negatives, but we noted some that were outstanding in quality. And it's interesting that all these negatives were in ordinary manila envelopes and had written on the face thereof the name of the photographer--[Alexander] Gardner, [F.H.] Bell, or whoever did the actual picture for Brady.

Adams: So we picked out some. There's a strange rule at the Archives. In the first place, we had to pull a lot of strings even to get into the place! But you couldn't touch anything. They're glass negatives, and they had to be carefully watched, because it's government property. Now, making a print means you have to put a negative in a printing frame and put the paper on it and turn it around, and turn the light on it. But I couldn't touch the negative, so I would designate one and the young fellow whom they had assigned to me would take the negative out of the envelope and dust it off and put it in the holder. Then I would put the paper on it, close it up and make a print, you see. And we worked that way, without disobeying the law. [Laughter] The Archives are not like the Library of Congress. It's a very special collection--a terrible lot of junk and I suppose some priceless things.

Teiser: Imagine anyone thinking that archives could handle negatives better than you! When you've worked with material in the Library of Congress, how have you--?

Adams: I've never made prints in there, but I think they might let me do them. I don't think they'd be as strict as the Archives. If they didn't know me or I had no reputation or no real introduction, they would be very tight, because after all, they have to watch and care for everything. But I don't think they would be as tough as the Archives.

Well, these old negatives, of course, were made by the wet collodion process, and they were made for the printing-out process, and they're extremely contrasty. Now, the difference between the printing-out process and our modern developing-out process is that the paper is placed back of the negative and is exposed to sunlight or a very powerful arc. The effect of the strong light reduces the silver directly. The silver halide is reduced directly to metallic visual silver. There's a complicated step in the process--I can't fully understand it myself. But in theory what happens is that as the print density builds up, it automatically reduces the amount of light that can reach the remaining exposed silver. So it becomes an "auto-masking" process. You finally get the silver to the point where no more light can get through--and there would be no more silver affected.

In the meantime the high values are building up, and the middle tones are getting grayer, and the whites are beginning to show values and textures. The trick is to print so that you keep a clean white and still retain a rich black. That means, of course, that the negative has to have a large density range.

Now, we didn't have that kind of P.O.P. paper, so I had to use Azo #0, that's the softest grade of Azo. And I used a developer, Amidol, diluted one to fifteen normal solution with water, which

Adams: meant the developer had a very low energy. At the same time it gave a pretty good print "color," and I could get a fairly good tone. The idea was to tone the prints in selenium. And after the week or so of work, we put these prints through an alkalizing bath and toned them. Then the young fellow said, "I'm going to be here tonight; I'll wash them for you, and you can pick them up in the morning." Well, he washed them, but the water temperature was running about 10° higher than the toning solution had been, and that took out the selenium tone. They were all just black and white again! So nothing to do about it there. I took them back with me to Yosemite and toned them in my Yosemite darkroom. The secret is, always wash your prints in cooler water than you toned them in. Chemically, the toning process is somewhat an adsorption as well as an absorption. Absorption is when the material actually gathers things unto itself; enters the structure. Adsorption is when it is attracted to the surface. A lot of this selenium sulphide is attracted just to the surface of the silver. As the gelatin expands under warmer water, it releases it.

In Yosemite I mounted them and I was careful to make a few for myself and the Museum of Modern Art too. They turned out very well.

Then we had another exhibit called "Sixty Photographs." And they were supposed to be highly and carefully selected pictures. Sixty images from the beginning to the most contemporary!

Teiser: Of all photography?

Adams: Of all photography. Sixty images that we thought adequate.

Teiser: Where was that?

Adams: The Museum of Modern Art.

Well, we wanted to include Genthe, but his prints were so lousy, on a kind of rough greenish paper, or brown-green, and his textures were awful, as with most "pictorial" prints. We couldn't find anything original and good. And he was an old, old man. And he had a couple of old, old ladies helping him to put his stuff in order in his little apartment in New York. He was a very fine gentleman, you know. He was a Ph.D.--Dr. Genthe. He was really quite a handsome man, and very erudite.

So I explained to him the problem. I said, "We want to represent you, but we can't find any print that does you justice." And he said, "I guess there aren't any." I said, "Well, would it be possible--could I, under your direction, make a couple of prints?" He said, "Why, just take the negatives. I trust you."

Adams: So I took these negatives of the San Francisco fire and of a street in Chinatown in 1904, and made the prints. And of course he was flabbergasted, because he'd never seen a print of that kind. It was on smooth paper. It didn't have that green tonality. And it was sharp. I printed them on smooth paper, and we toned them in selenium, and they came out absolutely magnificent. He could have done it--there's no trick in it--but he just wasn't in that mode or mood.

Teiser: How did some of his negatives get to the California Palace of the Legion of Honor?

Adams: Well, he either left them, or his estate gave them some. Well, they're not really--Genthe is of historic value--the San Francisco fire picture, looking east on Clay Street, was great. But as a rule, he's a very romantic portraitist. He was kind of the Cecil Beaton of his time--a great name-dropper. [Laughter] And a great ladies' man; a perfectly charming man; a superior person. But he wasn't, in the whole perspective, very important. But he just did a few extraordinary things--and they are extraordinary.

So that's for history of printing. And then I went to the museum of anthropology [the Laboratory of Anthropology] in Santa Fe, and they had some Ben Wittick negatives. I printed some of those in the same way as I did the Bradys. And that was part of the American frontier exhibit.

Teiser: Did you print them down there?

Adams: At the Laboratory of Anthropology. Then we had the big show. Of course, we had a lot of beautiful old original prints, and there was one of a cart at Laguna Pueblo--about twenty by twenty-four inches. Well, William Henry Jackson was living then, and painting away in water color, remembering scenes of the Wild West. He lived in an old New York hotel, and I would go down and see him.

When we had the opening of the show, he was the guest of honor. And he was ninety-eight. I said, "I will come and get you in a cab." So out of his hotel he comes, all dressed up with spats and a cane--runs down the steps, gets in the cab, and we go to the museum. The only impediment, the only trouble from his age was that he had a very cracked voice. And he looked at the photograph of Laguna Pueblo saying [imitates the voice], "Well, that's a mighty fine photograph. Who did that?" I said, "Well, Mr. Jackson, that's one of yours--1870." (This was seventy-something years earlier.) And Mr. Jackson said, "Well, by cracky, it is!" [Laughter] The old boy had several martinis, and then I said, "Any time you want to go home, I'll be glad to take you." He said, "I'm not going home. I'm going to a cocktail party on East 57th Street, and you're coming with me." So

Adams: I had to take him over to the east side to this nice little apartment, where there were many almost equally old people, all having their martinis. They were writers and painters--old buddies, you know. Very kind. So I was beginning to get worried. I said, "Mr. Jackson. You know, any time now, I'll get you down to the hotel."

He said, "I can't go home. I have to go to a dinner party. Now, I don't know these people, so I can't ask you to that, but I'll thank you if you'll leave me there." So we went over to the west side again, and up to the seventies to an old town house, and I got out and helped him to the door. I saw him a week later and he was fine. But he couldn't recognize his own photograph at first, and then I realized it was seventy years, more than my whole lifetime span, between the time he took that picture and looked at it! It was a great personal experience.

We had the titles wrong on a lot of things. They had been written on the back of the prints, and that's all we had to go on. He looked at them. "No, that's not Zuni. That's over at Acoma or somewhere." Or, "That's not"--a certain place on the Union Pacific, or "The title's wrong." I said, "We took the titles from what was on the photographs." "Well," he said, "you'd better correct them." So we did, as best we could, and we had to make the note on the back of the photograph that according to first-hand observation by Mr. Jackson, "this is it." This then stood as the correct title. And it's very difficult to do this archivally, because maybe he was making a mistake. You see, who is the final authority?

Teiser: You have, in your own acquaintance, spanned a great period of American photography. You've known people whose work went way back.

Adams: Oh yes. Jackson and Genthe, Dassonville, Stieglitz, Strand--who else? There's another old character in there somewhere.

Eastern Visit, 1933

Teiser: When we talked yesterday, we said we were going to start this afternoon with your trip to New York in 1933.

Adams: Well, that was the first trip we had east.

V. Adams: [From next room] That was the spring of 1933.

Adams: Spring of 1933. Well, there was a Depression on, you know, and Virginia was fairly well along with Dr. Adams [Michael]. [Laughs] (He was born in Yosemite on the first of August, 1933.)

- Adams: The banks closed, you see, while we were on the way [east], so we stayed with the Applegates in Santa Fe for, what was it?--six weeks?
- V. Adams: No, not really.
- Adams: [To Mrs. Adams] Well, you'd better tell it. You know more about it than I do.
- V. Adams: Well, we stayed about a week or so, but we kept getting telegrams and letters from Albert Bender, and they said, "Go ahead, go ahead." We didn't know whether we could or not. But the head of the bank there was kind enough to cash our travelers checks, so we went on east.
- Adams: Well, there was one lady who got hung up for weeks and weeks and weeks in Santa Fe. A limousine chauffeured her from Wilmington, Delaware. She was living in La Fonda [Santa Fe] and had no "cash" money at all. It was a very serious occasion.

Well, anyway, we went on to Detroit and Chicago. Had letters to various people. I made many boobos on the way. I remember one dinner party we were invited to in Chicago, and they were quite surprised to hear we'd never been to Europe. And one lady said, "Well, Mr. Adams, what do you think you would really like most if you went to Europe? Have you any idea?" And I said, "I think it would be the Gothic architecture." "Oh," she said, "it's very interesting, the whole Gothic civilization. But what part of the architecture really interests you the most?" I said, "The flying buttocks." [Laughter] I was persona non grata after that in that place.

And then we crawled on to New York, arriving on a terrible dull, gray, misty April morning, with ash cans out on the street. Somebody had recommended to us a little hotel, the Pickwick Arms, which was a hangout for tired radio and theatrical people. A very decent place but, boy, it was grim! Unbelievable. This was Depression time, and here, everything was just as sour as it could possibly be. Rooms were dark and dank. Service lousy. Food worse!

So I went out--sailed up Madison Avenue to see Stieglitz, who had just moved into 509 Madison Avenue. Then we went on to Yale-- I think I told you about going there and seeing Dean Meeks.

- Teiser: Yes.
- Adams: Oh, we went to Boston too, of course,
- Teiser: Did you meet other people in New York?

Adams: Oh, Alma Reed, and some of Stieglitz's friends, but not many.

Teiser: Did you learn anything in New York that you wanted to know?

Adams: Not much. Never have, except in a few isolated places. Well, it's hard to say that because, after all, there are the Cloisters. New York is pretty much the center, but I couldn't possibly live there. In fact, I even resent going there now.

Teiser: You had already met Marin and Georgia O'Keeffe.

Adams: Yes, I'd met them.

Teiser: Did you see them there at that time?

Adams: No, O'Keeffe was away. Strand was away. But I met Marsden Hartley, Paul Rosenberg, a critic, and a young writer named Einstein. (I haven't heard of him much.) And of course John Marin. It was all right, but I just don't look back at it too much. It should have had an awful lot of glamor about it which it didn't have for me, let's face it.

Then we saw our friend in conservation, Horace Albright.

Teiser: At that time what was he doing?

Adams: He was the president of the U.S. Potash Company. And of course he was always very closely associated with the Rockefellers. He practically raised the boys--one of their counselors. Very close to John D., Jr. A delightful person.

Teiser: Had you known him before?

Adams: We knew him in National Parks as superintendent at Yosemite and later as director of the National Park Service. He was very prominent.

And then we went to Washington and met Eugene Meyer. I can't remember the other people. Virginia might remember some, but I can't.

Have you anything to say, Virginia? You can't say it from there?

V. Adams: [From next room] I'm not listening to you. I don't know.

Adams: Well, we're trying to say what happened on that trip. They want to get the facts straight, and you know me and facts. Are you against being recorded?

V. Adams: No, but I just didn't want to intrude.

Teiser: Oh no, come in.

V. Adams: It was Mrs. Stern's brother.

Adams: Eugene Meyer.

V. Adams: Not Eugene.

Adams: Oh yes, the other Meyer, Walter Meyer.

Teiser: Was he interested in your photographs?

V. Adams: No, he was being nice, I think, to some young people that his sister knew.

Teiser: Did they all represent a kind of luxury that we didn't have in the West at that time?

Adams: Well, it's hard to say, because New York is the East--they have great wealth, but they seldom show it. Everybody still keeps it; everybody lives more "elegantly" in the West. I guess Mrs. Meyer's estate in Mount Kisco was probably something like Mrs. Stern's Atherton home.

V. Adams: Well, we went to the little farm that Walter Meyer had, somewhere around Mount Kisco.

Adams: A nice little place, but nothing pretentious.

And then these apartments--Mrs. [Charles] Lehmann[?] had a duplex on Fifth Avenue. Very big place--

V. Adams: You and I went to Doris Ulmann's apartment on Park Avenue.

Adams: Oh yes, then we saw Doris Ulmann, the photographer. That's important. I've forgotten that.

Teiser: Who was she?

Adams: She was the one that did a lot of photography in Appalachia, and of the Negroes in the South. A very wealthy woman with an old Mercedes car and a German chauffeur. Took pictures of everybody who came to see her. Had this great eight by ten camera and a flimsy tripod. And while her exposure of me was going on, I could see the camera swaying. [Laughter] So I said, "You know, Doris, really, your tripod's terrible." [She said,] "You know, I just can't get sharp pictures. I thought it was the lens." I said, "It's the tripod."

- Adams: "Well, will you help me pick one out?" So the next day I was picked up in the car and we went down to Willoughby's and all the other big photography stores; finally got her a tripod that would hold her eight by ten monstrosity up. And then she'd go to the lens case in the store and say, "I want that one and that one and that one." God knows how many lenses that woman had. She just would buy lenses like Virginia would buy "Cool and Creamy" at the Safeway. [Laughter] But she had a very fine feeling and did many fine things. She had a book published; I don't know whether we have it or not. [Added:] We do--several books.
- V. Adams: I know somebody else we saw when we were in New York that time, and that was those people whose pictures we have downstairs--
- Adams: Oh, the Zorachs. Yes, well, we'd known them in Yosemite.
- Teiser: You had climbed with Zorach?
- Adams: Yes.
- Teiser: What was it like for one person to paint or sketch and one to photograph on the same theme?
- Adams: Oh, we had a fine time. He didn't know anything about climbing. He nearly got killed coming down Grizzly Peak Gulch. Didn't follow my reasonable advice, which was not to get out on that slick gravelly granite. But he wanted to see if he'd get a view, and away he went, throwing all his new sketches up in the air, which showered down out of sight. He caught onto a little tree and just hung there; we had no ropes or anything. I had quite a time crawling out to him and getting him back, but he was chastened. I was scared to death, because he could have gone about three or four hundred feet, right down.
- Teiser: He lived in New York, did he?
- Adams: In Brooklyn.
- V. Adams: There must have been some connection with his wife's family in Fresno, because she visited Fresno. But that was before--that was early--'24 or something.
- Adams: Yes, in '23 or '24 we were climbing around the valley. And his wife was a very fine artist--painting and textiles were her main fields. They were both excellent.
- Teiser: So you were glad to come home again?
- Adams: Oh yes, very glad to come home again. [To Virginia:] Did we stop off at Detroit on the way home or on the way east?

V. Adams: No, on the way east.

We saw Diego Rivera painting something for the Rockefellers, in New York City, which was later destroyed because they didn't approve of it.

Adams: Of course we'd seen him before, in San Francisco.

Teiser: The Rockefeller Center murals--was that what he was working on?

Adams: Yes, they were in Rockefeller Center.

V. Adams: Was Radio City already started?

Adams: Oh yes. He was working in the big building.

Adams: And it was a very interesting thing, because the Rockefellers were very fair. But he gave them the "cartoon," which was approved by them; it was an historic perspective on America. Then he brought in Lenin and Mooney and had it all political! They said it was not according to the original agreement. If it had been in the original cartoon, they might not have bothered about it, because it was part of the history of the labor movement, and so on. But they didn't like being put upon.

Albright told me that. They were just furious. "Why should he put something over on us?" He didn't have to do that. He could have talked it over, and they could have listened. And what happened was they simply paid him off and painted the walls over and got [Jose M.] Sert to do the job. It wasn't a very good mural job. But Rivera could be an awful potboiler. The one in Detroit now at the big Museum of Art is fantastic.

V. Adams: You saw it again recently, didn't you?

Adams: Yes, while I was at an architectural convention. It was done before 1933. And every little wall space is filled with tight images and designs. It will take a couple of hundred years for that to really get back into appreciation because it's so corny compared to modern art. Well, maybe they thought that about the frescoes at Pompeii!
[Laughter]

But there's one big central design, men working, the great machinery (automobile workers mostly), that was very impressive. But all those little spaces! The whole room is like a great mosaic; little narrow spaces between doors all filled up. Pipes and people and hammers and expressions and clenched fists--[laughter]

Teiser: How long was that trip all together? How many months were you gone?

Adams: Oh, it wasn't months.

V. Adams: Whenever the Bank Holiday began was when we went east, and we came back when it got hot in Washington. We cut short going to the University of Virginia that we were to visit, because it was so hot we decided we were ready to come home.

Adams: Six weeks, I guess.

Teiser: Well, did you then keep in touch with Stieglitz after that?

Adams: Oh yes--constantly.

Teiser: Did you see him often?

Adams: Saw him a lot every time I was in New York; got many letters from him.

Teiser: Were you back and forth frequently in the thirties?

Adams: Well, I was there in '34, '36. Then with McAlpin, we went on a trip to the Southwest, went on a trip to the Sierras, went on a trip down the inland waterway, Norfolk to Savannah, and to New England. So I've seen a lot of the East of that character. Some of it's really beautiful.

V. Adams: When did you meet the Charles Sheelers?

Adams: I met the Sheelers at the Newhalls'. And then Barbara and Willard ("Herk") Morgan had their studio in New York, a big studio--I remember that it was a loft apartment. But again, I can't remember the exact date.

And Gjon Mili. I saw Mili on a recent trip.

I don't know--you meet all these people and you just can't remember. It just comes to mind by association, so if I think of something, I'll just have to interject it.

Teiser: In any case, in those years, you met a lot of people of significance and interest.

Adams: Yes. Robert Flaherty, the movie man--he was rather important. And Henwar Rodakiewicz, whom I'd known in New Mexico.

The Stieglitz Exhibit and the Adams Gallery

Teiser: Then in '36 you had the show at Stieglitz gallery. Was that just one in a series of exhibits?

Adams: Oh no, that was a very special one.

V. Adams: He hadn't been doing anything with photographers or taking anybody new on until he took you.

Adams: Then he showed Eliot Porter (perhaps before my show). But my exhibit there was a big event for me. Other things might have happened that were of practical importance. But this is sort of a papal audience!

Teiser: Was it a large show? Did you show many photographs?

Adams: No, thirty-five, thirty-six. The place was too small for a lot of stuff, which was really an advantage, as work is boiled down to the essence.

The 1963 show in San Francisco had over five hundred items, you see, which is ridiculously large. Big shows should not have more than two hundred prints. Strand had over five hundred, and you can't possibly take it all in at one visit. You have to go back and back again. You can put up shows at different times. But there isn't that much variety in a person's work.

Minor White had a big show, but it was too much also. So I'm trying to cut down. There's something about just a small exhibit--well, fifty or sixty prints is an ideal show. If they're all really your top stuff. Then people can look at them and they don't get fatigued. A lot of people were very mad at the San Francisco show. They had to come back several times to see it! They couldn't possibly go through it thoughtfully in a day or two days. They resented this.

Teiser: The Stieglitz show--at his gallery--did you show some portraits? By then you had taken quite a few portraits.

Adams: Oh yes, I had a few portraits. Stieglitz didn't like my portraits very much. He had a different philosophy. I don't like the "candid" as a rule. But I'd get a person's face in repose. And Stieglitz would say you have to sit for a one- or two-minute exposure! Then things happen, a combination of tension and relaxation.

Teiser: Did it advance you in prestige? You said it was perhaps more psychological than practical. But wouldn't it also have meant much for you so far as the whole art world was concerned...

Adams: I wouldn't know. I think that it's probable. I came back all fired up to have a nice little gallery of my own. I remember Stieglitz asking, "What's that group I've been hearing about out there?" I said, "Oh, you mean Group f/64?" He said, "Yes. Well, I'm f/128." [Laughter]

I tried running a gallery [the Ansel Adams Gallery, 166 Geary Street]. I tried to get some ideas in doing it, because I realized what Stieglitz was doing was very wonderful for young people, but it was at a totally unrealistic level. He had a private income. So did Strand and Dorothy Norman, who came from a very well-to-do family. In so much of the art of the East that I saw, people were unrealistic in the sense that they had money. When you don't have money, it's awfully hard to keep up with a noncommercial approach.

Teiser: The gallery was at one time called the Adams-Danysh Galleries. Who was Danysh?

Adams: Joseph Danysh.

Teiser: At the gallery did you do some photographic work too?

Adams: Not in the gallery, never had a studio as such. Oh, I did a couple of things, but nothing important. I used to do that in my home. But I never was really a commercial photographer, a professional. I would do things, but I never had a sign out. Most of the work was outside--project work.

Teiser: I think I read somewhere that you also gave some talks on photography and did you teach?

Adams: Oh yes, I did an awful lot of talking and yakking and print criticism. Yes--

Teiser: Do you still know any of the people who came to you then for instruction?

Adams: Some I faintly remember; some remember me. You just meet people, and people talk, and you talk and show prints, exchange ideas, and hope it's helpful. It takes a great deal out of you; much more so than people realize.

I notice that now especially, say at the end of the day. People come with a set of prints. It's comfortable sitting here talking, but when I should look at a bunch of prints critically--if you don't look at it critically, it's not fair. It's superficial. And you have to stand back of what you say, and make it clear.

Teiser: I was looking at a list of people whose work you showed at that San Francisco gallery, and Peter Stackpole was one.

Adams: Oh yes, Peter was quite remarkable. His father was Ralph Stackpole, the sculptor. I think he [Ralph] was one of our very best artists-- a wonderful person. He spent his last years in France.

His son, Peter, got interested in photography and worked hard to develop a 35-millimeter technique. And he would come around with his prints and look at various prints I had and compare definition; he was always trying to perfect definition.

Then Tim Pflueger, who was a great friend of Stackpole's, an architect and a big man around town, got Peter the job of documenting the building of the San Francisco Bay Bridge. It's a monumental series of pictures. He was right up there with the men, on the slings and on the cables and on the towers, and had a few close calls I was told. But that series of pictures that he made is really a very impressive set. And I don't know whether they really have been brought together as they should be.

35 Millimeter and 2 1/4 Cameras

Teiser: Was that the first time you had carefully studied 35-millimeter work?

Adams: When I was in New York--I think in '34--I went to see the Zeiss people--a Dr. Bauer, Karl Bauer, a very fine gentleman, who was the Zeiss American representative. He liked what he saw, and he wanted to know if I wanted to try the Contax. Now, the Contax was the only 35-millimeter camera that really worked, other than the Leica, and there was a very interesting psychology back of it. They made twenty-five prototypes, by hand, of a miniature camera, and gave them to twenty-five leading photographers in Germany.

They said, "We want you to find out everything that's wrong. Just comment--what's good, what's bad, what you'd like to have, etc., and send us your report. When the camera comes out, you will get one with your name engraved on it." The result is that it's the only camera made (I have a new one) that when it came out had no "bugs." It was practically perfect. It still is--that first Contax--and always has been the most perfect camera. I've had several. They've sent me different ones to try, different lenses to try. Now I have the Contarex, which is the last camera of that line made. But now, of course, the company is all mixed up, changed--now called Zeiss Ikon. The original Zeiss was appropriated by the Russians.

They made the best lenses, I guess, along with the Nikon people in Japan. The Zeiss Ikon establishment are phased out now. Zeiss Ikon was a big combination of German camera makers. They all got

Adams: together and put out the Zeiss Ikon line. Zeiss Ikon was a conglomerate name.

But the Japanese have gone ahead. A lot of the cameras you think of--the Pentax and the Minolta and the Konica--those are all Japanese. The Nikon of course is Japanese. The Canon is a Japanese Leica. So there's only three important small format European cameras today. That's the Hasselblad of Sweden, and I guess the Rolleiflex--I have to say that, but that's going to be made in Hong Kong or Singapore. And the Leitz, and the Zeiss Contarex, the only one left. And it's an incredible machine, a beautiful machine. I hope they keep it going.

Teiser: When you first used the 35-millimeter camera, did you take many pictures with it?

Adams: Oh yes, I did a lot of 35 work in the thirties and forties.

Teiser: Were they the kind of pictures you would have taken with other cameras?

Adams: No, no. Thirty-five millimeter is a language all its own, you know. You don't set up a tripod and try eight by ten quality pictures with it. It's more an immediate "extension" of the eye, you see. And I will be very happy to get back to it again some day.

Teiser: Oh, that would be interesting.

Adams: Liliane [De Cock] has put some 35s in the monograph.* But it was always a conflict between the mechanical perfection of the eight by ten image and the limits of the 35 millimeter, because in the old days, with the thick emulsion film, it was very hard to get away from grain, and it was very hard to get definition from corner to corner because of the negative thickness. The film was actually thick, and light impinging on it at an angle, in any density level of importance, enters the surface at one point, and emerges further away from the axis of the lens. So when you look at that directly in the normal position, you see diffused areas near the edges. With ordinary short-focus enlarging lenses it was very difficult to get an all-over crisp negative.

And then they worked with thinner and thinner emulsions--now the problem is quite minor. But a lot of people become very careless with the 35, sloppy and get harsh values in black and white. Of course, the Europeans use it almost exclusively. Maybe that's an

*Ansel Adams. Hastings-on-Hudson, New York: Morgan & Morgan, 1972.

Adams: exaggeration. But most journalists and most people who travel do, and they have their work done for them. Not too many European people print. I don't think Cartier-Bresson prints his own. So print quality as we know it as being part of the expression, it doesn't exist. It would be like a composer never hearing his works done, you see, or having someone else finish it without his control. But there is something about the inherent quality of the 35 millimeter.

Of course, the Hasselblad is betwixt and between. I can get incredibly sharp things now with 2 1/4 by 2 1/4 film.

[End Tape 13, Side 1]

[Begin Tape 13, Side 2]

Teiser: We were talking this morning to Mr. Richard Garrod.

Adams: Oh, nice man, yes.

Teiser: And he was saying that Brett Weston had recently been given a single-lens Rolleiflex and it was opening a new world to him.

Adams: That's quite true. It wasn't recently; I think it was two years ago. And of course he was always a large-format man, and then he tried the Rolleiflex, and he's used very sharp film, like Adox, and a point-source light, and he gets extremely sharp, brilliant images. (It's interesting that the Rolleiflex uses exactly the same lenses as the Hasselblad made by Zeiss.) But what it's done is to open up for him another world. But it is a very abstract world. It's about the same point of view that he would have with his eight by ten, except that he can do more on a physical basis. The 2 1/4 by 2 1/4 and the four by five--those formats--really relate more to the larger format now. The 35 millimeter still is something of particular function and quality.

Teiser: When the Rolleiflex first became popular, the twin-lens Rolleiflex, wasn't that thought to be a journalist's camera, and no serious photographer--

Adams: Oh yes. But it was a beautiful camera. The trouble with the twin-lens--it has parallax which you can't overcome. The correction of parallax that you hear about is merely that as you focus near objects, the mirror tilts, so that you center the object in the field. But the taking lens still doesn't see it as the other lens, so you have to elevate the camera the same distance as the difference of the axis of the taking and the viewing lens in order to get the correct reference in near/far images.

Teiser: But wasn't the size even considered a great limitation when it first came out?

Adams: Oh yes. Well, one of the problems was one of getting negatives of good quality. But many, many people used it, and people like Dorothea Lange and most people in the Farm Security group would prefer that to 35 on the basis of quality. But you remember that all of those cameras have no adjustments, and when you tilt the camera you get convergence; you have no way of correcting it in the field. So it had certain limitations.

Now the Rolleiflex and a couple of other new ones have tilt fronts, which give you a little better definition, near and far. But the Zeiss lenses are designed for maximum coverage of the 2 1/4 by 2 1/4 on axis. So they don't have much "covering" power; they're not designed to have it. Now, you take a Goerz Dagor or you take the wonderful Super Angulon lens--the 121 millimeter lens covers an eight by ten on axis, which was unheard of until it appeared. [It] is a computerized lens. So that means you can take a four by five area and move all around in an eight by ten field. And that gives you an idea of the amount of adjustments you have--how much you can move the image, you see, and still keep a sharp field.

But these other lenses, especially the Tessar type, if you move them half an inch or so you may get into trouble. Brett has done extremely fine work with the Rolleiflex. I don't like the camera as much as the Hasselblad. I think it's very bulky. It has the focal plane shutter, which Hasselblad got away from. (Because it seems to be impossible to make a focal plane shutter that really works.) The Hasselblad system has got a shutter for each lens. Well, the difficulty there is that the shutters are not all the same, so you have to have them all calibrated. But at least, once they're calibrated, they're consistent.

But the thing that a lot of people forget is that the old Graflex, the reflex type, which is like the old Mirroflex of Zeiss, and several English cameras--is the first single-lens reflex in which you saw exactly what the lens was seeing, and the mirror moved up out of the way when the shutter was released. But of course it was a reversed image on the mirror. And the cameras you have now use the pentaprism; the "roof prism," as they call it, not only puts the image right side up but also makes it "right side" too. It's a very complicated cross-over. It's called a "roof" because the image meets the roof and folds around, laterally. And it's quite an amazing optical device. One can't see that dividing line!

Teiser: The Hasselblad has that, doesn't it?

Adams: Several have that now. It's a rather massive thing. The Hasselblad has it, the Rolleiflex has it, as well as the 35 millimeter.

Teiser: How did you happen to start using the Hasselblad?

Adams: They sent me the first model, the 1600, saying, "We'd like you to try this. Tell us how you like it." Mr. [Victor] Hasselblad is a very fine gentleman. So I got it and I worked with it, and I wrote a report; it was about sixteen pages, double spaced, of what I found wrong with it. From that time we were buddy-buddies. The people that designed these cameras were engineers, had never taken any pictures. For instance, the first camera, you'd put it in a knapsack and tilt it and the mirror would fall out of its toggles. The engineer had only thought of the camera as being upright. You don't have to turn it sideways, because it's a square image. He never thought you might carry it sideways.

Then the inside was a jet black cube. But there's no such thing as a nonreflective surface, so we got some of the worst flare that any camera's ever produced. And the lens shade was round because that was the way you made lens shades then. It's just a convention; it's perfectly ridiculous. Now Hasselblad has finally come out with a lens-shade box system that the movie people have been using ever since the days of Griffith, I think. It's just a square opening, combined with bellows, which "frames" the image; whatever the particular lens is seeing. It's quite a beautiful device.

So then they made the 1000, and that was an improvement. That meant one-thousandth of a second, focal plane.

Teiser: What was the 1600?

Adams: One sixteen-hundredth of a second. They never worked up at that level. They never worked up to that point at all. They were pretty accurate in the lower levels.

[Richard McGraw enters] Hi! Dick McGraw, this is The Bancroft Library oral biography people. I'm telling them all. I was just talking about you recently.

McGraw: Don't tell them too much about yourself.

Adams: They ought to interview you so you could tell them. [Laughter]

The between-the-lens shutters are, of course, more dependable. In theory they shouldn't be, but it's awfully hard to get mechanical systems that will move a curtain across a field at equal speed, from start to finish. Of course, they've had all kinds of mathematical

- Adams: compensations, where the curtain slit is a little bigger at first, and then gets smaller as the curtain speed increases.
- Teiser: Is there one called the Copal?
- Adams: Well, that's just a between-the-lens; that's just a make, a design.
- Teiser: Is there not a different kind of--
- Adams: Oh, it has a little different system, and it's a shutter-blade system. And of course we have the electronic shutters now, they're somewhat different. They work on a capacitor system. They're very accurate and quite expensive.
- Teiser: Did you use the Hasselblad then quite a lot for awhile?
- Adams: Oh yes, ever since I got it, way back in the fifties. I've used it a lot.
- Teiser: I suppose you don't take pictures with it that need the adjustments--
- Adams: No, I use my Arca Swiss view camera. Of course, you remember, there are ways and means of correcting distortions by enlarging systems, where the lens and the easel can be tilted to overcome the distortion. It's a pretty complicated business, because there's the negative holder and lens board adjustments. I'd rather get it straight to begin with!

Now, getting back to 35 for a minute, we find that with color, many publications, like National Geographic, demand 35-millimeter color because they can get better results than they can from larger transparencies under their economic way of doing it. I don't know whether that would hold if they really went to town with the larger formats, but they can make a blowup from 35 and get an illusion of depth. Also, anybody who goes out to do a story for National Geographic does literally thousands and thousands of pictures, that you wouldn't do if you used a four by five camera!

Photographs for Magazines

- Teiser: Have you ever done any work for National Geographic?
- Adams: No.
- Teiser: Have they picked up any of your pictures ever?

Adams: I think they used one once. We aren't very sympathetic. Their whole approach is extremely factual. Of course, it's getting better now. But it's a kind of sterile thing. They don't invite aesthetics.

The worst example we had of that is when an editor from Holiday magazine came to San Francisco just before the magazine started, and he had a big lunch or dinner for all the photographers. Invited about thirty or forty photographers. And everybody got a little happy and gay, nice dinner, and then he talked with them. He said, "We're putting out this new magazine, and we're interested in ideas, and we'd like to give you as many assignments as possible. But we want it very clearly understood that we want to make the pictures to look like the kind of pictures that a reasonably knowledgeable, wealthy traveler would take. "We don't want no esthetics." [Laughter] In other words, the individual photographers are proud; some got up and walked out. And he tried to explain what his concept of journalism was, that this magazine was to be sold to those people. First, they had to have money, good equipment. Now, what kind of pictures do they get? If you showed them better pictures than they can do, you're patronizing them. So we can't have that, you see. [Laughter]

Teiser: Didn't Holiday end by having some slightly more imaginative pictures, though?

Adams: Yes. But you have to realize that when you're thinking of movies, like the Disney movies, or National Geographic--any magazine--that probably for every picture shown there's been a hundred taken, at least. The law of averages says that if you take one hundred, you might get something, and if you take fifty, you might not.

And of course, the best of all--Herbert Bayer, the designer--we were all down at Aspen once, and the advertising man from Kodak was attending the conference. He said, "Mr. Bayer, how many submissions do you make when you have an advertising design job?" Mr. Bayer says, "One, the best." Well, the Kodak man just couldn't possibly understand. Because they're so used to seeing dozens of things come in of the same subject. A fine artist says, "Well, you ask me to do it, so I do one. That's my best. You don't see the others."

And that is a problem in photography. I did a number of assignments for Fortune, and you're working under a time pressure, and you don't have time to contemplate, think and balance and figure out. You have to do it. You have two weeks for the Union Carbide article, for instance, and you work all day long and into the night and you get everything you can and you know you've failed on some. And you do them again and again. Then you end up with some things that they're happy about. But if they'd only

Adams: give you two months, you could do so much better, but that isn't the way. Everybody waits until the last minute, and then--"Got to have it right away!" Has to be in yesterday!

Teiser: When you work for a magazine like Fortune, however, isn't it a lot more satisfactory because the reproduction is--

Adams: I haven't done anything for a long, long time. I wouldn't know. It used to be pretty good. It was a showcase for the advertising profession, primarily. Very interesting thing--the whole theory of Fortune. It still keeps going. It is notoriously inaccurate. And I know, for instance, that the story I did with the PG&E, they made something like twenty serious factual mistakes. And the PG&E people were trying to prove to them. Of course, this was out of my field; I was doing the pictures. They were trying to say, "Well, this isn't right!" But the editors would go right ahead and do it their way.

Now, the same thing happened with the big corporate farm story they did in the Central Valley. Dorothea Lange and I worked on that. And they made all kinds of impossible statements. We saw the text, and Paul Taylor would say, "That's not right. This is not the description of the 160-acre law, and you've got the dates wrong." Fortune would say, "Oh, we know what we're doing." So--it really is a come-around that you really can't trust anything.

Polaroid had an article in Fortune. They didn't say much about it, but I know it missed a lot of things, exaggerated others, and was wrong in others.

A journalist gets in there and resents any adjustment. A photographer, he just tries! Your best pictures aren't used, but you've got nothing to do with that. However, the titles are usually right; they don't mix those up.

Teiser: When you do work for a magazine, then do they own the negative?

Adams: It all depends. Usually, in an editorial story, they buy the rights. They may want the negatives; on the other hand, if you've done some beautiful stuff, you might keep the negatives. Then if you ever use it, you only use it with their permission.

And the big battle with the A.S.M.P. [American Society of Magazine Photographers] is when advertising use is involved. You see, there's a difference between editorials and advertising. When you do an advertising picture for a firm now, what are you doing it for? Are you doing it for the one-time right, say a page in Life, or are you doing it for the many times they wish to use that picture in many magazines? And there's been a big squawk about that, because the firm claims they can't afford it. Then we

Adams: counter back and say, "Well, you're paying \$45,000, \$50,000 a page." One page in Life now--one issue. "Well, that's why we can't afford it." [Laughter]

So the cost of advertising is simply tremendous, and there's right on both sides. It seems a photographer should get a certain percentage of the total cost. But say a Life page costs \$40,000--the makeup alone of that page is costing the agency \$5000; the photography might cost as high as \$5000, plus the models used. There's \$50,000. Well, of course the photographer would be paid fully. But the agency takes 15 percent on the purchase. So if you bought \$100,000 worth of advertising from Life, the agent will make \$15,000. And that's where they make that money. Plus billing for the photography and the art work and so on. So when you hear of an agency having a \$100 million billing, that means perhaps that they took in \$15 million as profit, because above and beyond that they have to pay for the art work, but the customer also pays for the photograph. But there's no two things exactly the same. It's quite complicated.

Teiser: Have you done photography for ads on commission or have you--?

Adams: Oh yes--I've done several things. I did some for the National Gas Association, just did a series for the Wolverine company--a catalogue.

Teiser: Were they done for that catalogue?

Adams: No, they just used existing work.

Teiser: They took ones you'd already done.

Adams: And in my position now, I get a pretty high fee for the use of a picture. But if, of course, Wolverine called up and said, "We want to get a picture of a particular scene, with a mountain boot. We want this situation," and so on, that's kind of a big undertaking because you have to figure everything out from scratch, you have to get your models right, you have to get a location. I don't know what the going rate is now; the highest I know of was for a 35 millimeter shot of a still life that was on two pages of the Ladies' Home Journal (I think) by [Richard] Avedon. He got \$3600 just for the use of this picture. That was editorial, you see. Now, if that had been an advertisement, he would have probably gotten much more.

Assignments

Adams: They have rates. When you do a job, it's so much a day, or so much a page, whichever is larger. If I go out and it takes me ten days to do a job at \$400, that's \$4000. If it's ten pages, at \$400 a page, that's \$4000. But they usually pay expenses in addition. Kodak always is very generous--model expense--all your expenses, mileage, food, anything. All the film you could possibly use. And then on top of that, they guarantee a fee for the accepted picture--\$1000, \$1500, whatever it was.

Well, for one Colorama I did for them, the costs went way over \$6000 (this was twenty years ago) because of the trouble we had finding the location and having expensive models along. I'd call up Rochester frantically; I'd say, "Look, this is getting out of hand." "Oh, just keep at it. That's all right." Well, it was \$6800 expenses!

Teiser: When you did work for Kodak, did they specify a certain type of photograph they wanted or--?

Adams: No. This is for the Colorama. They did two things: the big Colorama in New York Central had to fit a certain dimension--a certain size film. And I made mine seven by seventeen, the film was cut for the seven by seventeen banquet camera. The image came out finally 4 3/4 by 16 1/2. It has to be seen and planned on that proportion, using models in the costumes and the desired colors and using Kodak cameras. And the Kodak camera has to show well and the models have to be the strawberries-and-cream, all-American "wasp" type, you know. Then of course it has to be very sharp, because it is blown up to sixty feet long. Well, that's one phase, and I would submit many images. We'd go out for maybe a week, and I'd maybe take ten, fifteen, or more "situations." And I'd go through \$250 worth of flash lamps (blue) to fill in shadows. I don't know what the film cost. They get that at a rate, but that's hundreds of dollars, you see.

Then the other type is where they tell you, "Now, if you're going on a trip, we'll send you a bunch of film. We guarantee five hundred dollars," or so for a picture. And sometimes I'd come back and would have less than that in value, and they wouldn't care. And sometimes I'd come back and have very much more.

So they've always been very fair. Of course, that's quite a time ago. The rates have gone up. And they have their own crews. And some of these things are getting terribly sterile, because they don't have proper artists.

- Teiser: Things like the U.S. Potash series, was that for annual reports--?
- Adams: I did quite a "take out" for IBM. They asked, "Come and do some pictures down at the Poughkeepsie plant." I just went there and lived at their Homestead at their expense and made many photographs.
- Teiser: Had you done many so-called industrial photographs before?
- Adams: Yes, quite a few.
- Teiser: Can you remember what your earliest industrial photography was?
- Adams: Oh, I did a winery.
- Teiser: When was that?
- Adams: Oh gosh, that was back in the thirties.
- Teiser: What winery was that?
- Adams: The S&J Winery, up in Lodi. And then I did Kennicott Copper; and Union Carbide; Del Monte Properties, many years ago.
- Teiser: What about Salz--
- Adams: The Salz Leather Company, yes. In Santa Cruz.
- Teiser: What work did you do for Salz Leather?
- Adams: Just pictures in the tannery.
- Teiser: IBM?
- Adams: And there's IBM--just the Poughkeepsie plant. They then made typewriters and some computers there. Then they moved the typewriters to Kingston and the whole building went to computers. Then they moved the typewriters from Kingston to Kentucky. Now the typewriters are I think made in Italy, and I guess the Poughkeepsie plant is still in advanced computer work. And they developed the new research lab at Kingston--a perfectly gorgeous place.
- Oh, I did all kinds of little things; I can't begin to remember.
- Teiser: The book for the University of Rochester?
- Adams: Yes, I did a book for the University of Rochester, Creative Change. The University of California--Fiat Lux. Dominican College, and Paul Masson. The Sugar Institute as well.

Teiser: Is that beet or cane sugar?

Adams: That was beet--well, a little of everything. The Sugar Institute was a general institution, and we had the cane sugar from Hawaii and the beet sugar locally. And of course you're never supposed to speak of one with the other, although it ends up as identical sugar.

Teiser: They present different photographic problems, don't they?

Adams: Only in the field--

And of course my biggest continuing project has been my consultantship with Polaroid.

Working with Dorothea Lange, Continued

Teiser: You mentioned that you had worked with Dorothea Lange on--what was it?

Adams: Well, we worked on the Fortune story on the Central Valley, the corporate farms.

Teiser: I think you said you'd worked with her on a series on the shipyards.

Adams: Yes, that was the OWI--the Office of War Information. It was quite a "take out." Then we did a big story on the Mormons in southern Utah--three villages, Gunlock, Toquerville, and St. George.

Teiser: What was that for?

Adams: That was done for Life, but that was kind of an unfortunate mix-up....

Teiser: Did it appear?

Adams: It wasn't very clear to anybody; it was a misrepresentation. I didn't like it.

Teiser: Was it published?

Adams: It was published, but very small. We had an exhibit.

You see, they told me that we were going to do this exhibit, that Life was going to publish it. Of course, the Mormons are very suspicious people. Dorothea and Paul [Taylor], they took it on, and they went to Utah and saw the big shots and got permission, and it was very difficult. Then once we got in, we got going pretty

- Adams: good, and the first set of pictures were very fine. Then it got intellectual--Dorothea's capacity to get intellectual--and it's a very strange dichotomy there, because she changed the whole character of this exhibit from an emotional thing into a sort of a sociological viewpoint. And then a few pictures came out in Life, which were a very poor representation.
- Teiser: Does it still exist as a collection somewhere?
- Adams: I don't know where it is.
- Teiser: Life has the whole thing?
- Adams: No, Life just has a set of prints. I don't know what happened to the exhibit.
- Teiser: I hope it's been preserved.
- Adams: Well, they weren't very satisfactory--
- Teiser: As it was originally conceived, was it?
- Adams: Well, as originally conceived, I think it had a great quality, but when you get into politics, social points of view, things can get hairy, you know.
- Teiser: The OWI?
- Adams: Well, it was a story on the shipyard production at Richmond, and the life of the people. Of course, we got lots of things that were not too pleasant, like people living in trailer houses on mud flats. We had to walk over fifty feet of planks to get to them, through mud. Incredible bars. And then, one of the typical things--we were getting on the Richmond ferry and seeing these people come in from some factory on the Peninsula and just flop down and go to sleep by the boilers, just getting some rest so they could work the next eight hours at Richmond. There were untold numbers of people that were doing two full shifts a day--moonlighting under different names and everything. You see, it was kind of controlled, but they got by with it. And some of them had sons in the war, and most of them were really trying to do everything possible. It was a terrific experience.
- Teiser: Was that satisfactory to you?
- Adams: Yes, that was all right. We mixed our negatives. I can recognize some I did and some I don't know. I mean, we would just work together. For instance, we had one big job of the people coming down out of this building--quitting time. Just a whole flood of people coming.

- Adams: That's my photograph I remember--
- Teiser: That's one often attributed to Dorothea Lange, isn't it? [the one in the 1966 Museum of Modern Art catalogue, Dorothea Lange, captioned "Shipyard Construction Workers, Richmond, California, 1942"]
- Adams: But when I say it's mine, I mean we were there with the camera, so we worked it together.
- Teiser: Were you using similar cameras?
- Adams: Oh, sometimes. Yes, I used a Super Ikonta B and four by five and five by seven cameras. Then we had to do a picture of the big church in North Beach. That was a toughy. I always got the tough technical things to do!
- Teiser: Was that in the same OWI series?
- Adams: Yes, in some way related to the freedoms--part of the government project. But we did the freedom of religion, and then the farm scenes--it was very complex, and I don't know what really happened to that.
- Teiser: Are all of these negatives with Dorothea Lange's negatives in the Oakland Museum?
- Adams: I don't know where they are.

I had one--my trailer camp children was part of the OWI series. I wouldn't give that negative up for anything; I want to hang on to that. Then I have another one of this stout Negro lady sitting in her trailer home doorway above the mud.

- Teiser: With the goat?
- Adams: With the goat, and then the panel in the mud, you know.

And then I had another one of the work transfer desk, which is quite an emotional picture. I'd like to think of using that again in an exhibit. You may remember that one, of the men talking. It was done with a remote control camera. I was controlling the camera as far away as I could. And these people would come in and plead to change their jobs. You see, jobs were fixed. And they'd come in with their hard hats on and say, "My family's not doing so well in Alabama, and there's a job down there in a war plant, and I'd like to transfer." So they'd have to have it all analyzed; some could get it, some couldn't.

Adams: But there's something strange about that--I wonder why people don't like that picture much. The expression of the man is very good. Maybe it's the way it's cut. His head is against the light globe. I can see where that would be disturbing. They weren't even conscious of the camera. The camera--a Zeiss Juel--was low on a tripod, back of filing cases, and I was operating it from a distance, trying to get these people. They were talking. Because in those days, people were very camera conscious.

Wartime Work

Adams: That takes us into the wartime. Part of the war, when I was working--I wanted to get into something, and I was past the age--except for extreme emergency--of what you'd call military work. But here I was a photographer and I wanted to do something. Well, whenever you ask a military man and say, "Am I going to be a photographer?" they laugh at you. They'll make you a cook, like Brett Weston. Through the intervention of Charis's uncle--a general--he got closer to photography than many. He was cleaning film on Long Island--movie film!

I asked General [Simon B.] Buckner once. I said, "I never can understand. Here's trained photographers, and gee, as soon as they get in the army they're digging holes somewhere or putting up fences or cleaning guns." He said, "Well, you don't understand the military. There's just a certain number of photographers. We have to start from scratch. And when we get a man in--unless he's a very top expert and goes in top echelon, he's a person in the ranks. He gets a kind of evaluation, and maybe he'll be a good cook. So we train him to be a cook. I don't care whether he's a photographer or anything. Because in that way, there's always a resource of expendable manpower. A trained cook could be eliminated, and there'd be another one. But if you said, 'We've got just so many photographers,' and put them in, if they were eliminated we wouldn't have this recourse. So we can't count on their previous training."

I wanted to do something. So Steichen called me up one day, and he said, "Adams, I want you to run my labs." You know, he was a captain in the navy. And I said, "Well, that's the only decent offer I've had, where I feel I might be able to accomplish something." "Yes," he says, "this is very important, and you'll hear from me within the week." And the rank would be major and, oh gosh--lot of baloney--guaranteed living quarters, and "You would direct my central lab." That's the last I ever heard of it.

Adams: After a week, I called up; they said, "Captain Steichen is in the South Pacific." I said, "Does anybody know about my offer?" He said, "No, So-and-so is running his labs." As far as I can make out, it was just a lot of hot air. I never had any use for him anyway. This is one of the typical examples.

I went down to the Art Center School--well, it was before then. I guess I was there earlier. But the Art Center School did get contract jobs from the army. One was to train an airplane workers photography group. And the other was to train young men for the signal corps. That was very interesting, and was really complex. Maybe that's worth a whole yak some time. Then there was the office of engineering management and--well, it had three initials (I forget). The schools were given grants for training. But you had to have a minimum class; there had to be a minimum number enrolled. The Art Center manager would go out in the street and pull in the funniest people you've ever seen, you know, and say, "Come on, we've got a job, and it pays pretty well. We'll train you to be a printer." Our assignment was to teach people to be printers. Other schools had the negative developing classes. We would get reject negatives from the airplane plants by hundreds. All kinds of parts of planes--detailed electronic stuff, etc., and the students would have to learn how to print them. Well, of course, it hit me right away--how do they know what they're printing? I don't know what these things represent. There's no title. They're all either stamped restricted or there's nothing.

So we started analyzing light on various substances. If you take a stainless steel tube, it will have a certain highlight. But the thing you first look at is the shadow, and if the shadows of all these little pieces are sharp, then you know a spotlight or sunlight was used.

If the shadows are very diffused, you then have diffused light--maybe available light in a room, or a big floodlight. Well, once you know what the kind of light is from the shadows, then you can figure what the highlight means. So you can then interpret whether you're printing for steel or plastic or fabric--so we would ask these people, "What do you think this material is?" And they would finally get it; would study the negative and say, "This is a plastic sheath over here, and this is a metal tube," etc., and then print accordingly.

Well, we got quite a commendation on the people who went to work in the plants because they could take a negative that they'd never seen before and print it and make some visual sense. It was a very interesting thing.

Adams: Then I taught a group of people--a "disaster group" in Los Angeles--at corpse identification techniques. In case of disaster, how do you photograph? Well, we used a system of mirrors. And we'd go to the morgue and pull out somebody; then we'd place the mirror and photograph the profile and the full face in one picture. And the idea there was to make two prints--one reversed for recognition. So somebody could say, "Well, this picture's a profile; it's right. And this other one is full face. It's right." And we had twenty people in that group.

My last night in Los Angeles, I was up until nearly midnight in the morgue with a group of people making photographs--and measuring and documenting. Then they had to figure out how--when you have a disaster, you're not nicely laid out on a slab in an icebox, you're out there in the dust. And what do you do? And they had all kinds of techniques--trying to just get identification. And numbers had to be placed in the image--coded numbers and dates.

And I arrived at Edward Weston's the next morning smelling of formaldehyde, feeling very weary--having spent part of the night in the morgue. You picked up this formaldehyde effluvia--very interesting stuff. Didn't bother me any--those people were not worried about anything. [Laughs]

Teiser: Was your whole period of teaching at the Art Center School just in wartime?

Adams: Oh no, no. No, we had a regular photography department. But then the war came on, and the whole school responded.

Problems Encountered

Adams: Several things I did for Fortune were preliminary--in anticipation of the war. I never realized it until later. But the people who knew just said, "We're going to be in this, and we'd better get ready." I photographed [for Fortune] the big electric furnaces of Union Carbide in the town of Alloy [West Virginia]. Unbelievable. I don't know how they work them now, but the electrodes--carbon arcs--a single arc three feet in diameter, nine feet long, and three of them are screwed together. They were cast with threads, so they'd be screwed together into a single arc twenty-seven feet high--carbon. And they would be grouped together in threes, operated by hydraulic controls, and the cauldron was as big as this whole place--forty feet across. The voltage was only six volts, but it would have a tremendous amperage. And the current comes in in folds of copper--not wires, but just thick bands--ribbons--of copper.

Adams: Well, anyway, these great carbon electrodes come down into this mix--slowly come down and make the contact, and it's just like a volcano! It displays absolutely tremendous power. They had a hydroelectric plant just for that purpose in that area.

[End Tape 13, Side 2]

[Begin Tape 14, Side 1]

Adams: Now, getting back to this photography for Fortune, the photography of the electric furnaces at the town of Alloy, which is up the Kanawha River. I described these great electrodes, which were three feet across and twenty-seven feet long--three of them bunched together. And the tremendous amount of electric power required. And when these things touched the mix (I think they call it the mix), it's something like a volcano. And they keep burrowing in, and producing tremendous heat. And finally the material starts to melt. It is steel and various alloy chemicals making up certain crucial alloy metal.

Nobody is supposed to be in that place when the contact is made, because it'd be like being on Mount Etna during an eruption, you see. Well, I said I had to be there to make the photograph. So they made me an asbestos garment, and they made an asbestos shield for the camera. And I would stand there under the shield with my hand on the cable release, you see. One could see just the lens and my goggles. When the process began, I thought, "What am I doing here?" Pieces of molten metal were coming at you. And after about five minutes of this it quiets down and just starts to melt, and then finally the carbon arcs are used up. You see them dropping, slowly dropping into this incredible blue-white heat. I forget the temperatures. I think it was over 4000°. It's one of the highest temperatures used in metallurgy. I wouldn't want to state it erroneously.

Anyway, when they pour this "melt," it's blinding blue-white. And it runs out like water that seems much lighter than any water you have seen. It just pours out through the channels--and you have to wear goggles. You can't possibly look directly at it. And they'd make these big ingots, and they go off to the mills.

And then we had another job for the Gas Association,* showing the various uses of gas in industry and in the war. Oh, I did everything from gas baking crackers to annealing anchor chains! This was in Columbus, Ohio. I watched the chains come out of the annealing chamber, moving very slowly. There was a great pile of them. So they got a platform built, and I got my camera set up, focussed on where they would be. And I was to take these red-hot anchor chains as they were pushed out of this great asbestos crib.

*National Gas Association.

Adams: Orange-hot, they'd come out, moving very slowly. And I'd say, "Stop," and they'd stop the belt and I'd take the picture. "Let it go," and I'd take another one. And that was all rehearsed.

And here I am up there, and the real thing's happening. This was in color. And out comes the chains. The heat was something unbelievable, you see--never counted on that. So I'd yell, "Stop," I'd take a picture; "Stop," I'd take another one. Finally, my pants caught on fire. And I just grabbed the camera and jumped, because here was a pile of massive chains that would fill this room, and you're just about ten feet away from them.

Teiser: What happens to color film in that heat?

Adams: Oh, it doesn't make any difference. I got beautiful pictures. It doesn't get hot enough for the camera, but my pants came down nearer to them, and they just started to smolder. And I still have a burn scar on my leg from it. But it was quite exciting.

These things happen to all photographers, sometimes much worse things!

I think it was Eisenstadt--some big Life magazine man--who was up on the roof of a great cathedral--oh, I know what this is: it was when they were building the fake Gothic Grace Cathedral in San Francisco in concrete. And the photographer was up there in the roof getting pictures from the top. He dropped his camera, and it fell all the way and landed on a little piece of wood just above the concrete floor and bounced over on some sacking--no damage! [Laughter] People have all kinds of things happen, but of course all photography is not really glamorous. Most of it is very hard work, very boring--waiting, fussing with equipment, worrying about lights, etc. I told you what happened with the round table group in the Palace Hotel.

Teiser: Oh yes. [Laughter]

Adams: And then the fact of getting somewhere and finding that you've left all your lenses at home. You've got the camera, film--but no lenses. When I was very young, in the 1920s, I made an arduous ascent to the top of North Dome in Yosemite, with the most beautiful thunder clouds I'd ever seen. I exposed twelve plates, and came home and found I'd taken all the empty holders instead of the full holders. There are equivalent stories that every photographer can tell you.

Teiser: You were speaking of Rex Hardy. I remember he had a story about his first assignment for Life, taking time-lapse photographs of a flower opening in a greenhouse. He thought he was going to lead the glamorous life.

Adams: I did an assignment for Life which was a begonia story. And that was to be fourteen or sixteen pages. It was a very lucrative story. I got a several-thousand-dollar fee and time and expenses. The begonias were up near Capitola, Santa Cruz, that area. Well, the problem was, of course, when you're working with begonias outdoors, the sunlight is very difficult and you have trouble. So we did them in the greenhouse. But we had to use certain color filters to balance the light through the greenhouse glass. One person said, "That's just diffuse light, so you don't need any." Well, you take one picture and you find you do. That light was very much toward the greenish, so I had to use magenta filters. And after working a week and having pictures taken, processed and looked at, I finally got what I wanted. That's before they had color-temperature meters. Now we have electric color-temperature meters that work well. They're very expensive, but they're really very elegant. They can tell you the Kelvin temperature in almost any situation. And they translate that into what we call "decamirad" control. And you use filters as indicated to balance the light to the sensitivity of the film. The eye does that automatically, of course. You can be in blue skylight or warm tungsten or light--and white paper still looks white to the eye, but not to the film!

So I did all these pictures--beautifully. I worked like a dog for three weeks. I understand the pictures were printed--the whole insert of sixteen pages--I saw the proofs. They were beautiful. They were all ready for an edition of Life. But "news" started happening, and they couldn't find enough space. Finally that whole begonia project was junked. They prepared a little story on begonias in which they used a couple of the plates, but that whole sixteen-page signature of color photographs--a million copies or more--was printed, and then junked. And that happened to so many Life stories. It finally came to the point when they could not afford such stories. It costs thousands of dollars to print one of these inserts--maybe fifty or sixty thousand at least for that one.

Teiser: You don't do your own processing when you do color?

Adams: Oh no, I don't. A lot of photographers do. Life photographers sent the work back to Life. They had wonderful labs. Life bought whole "emulsions" of color. They'll order an emulsion and get the whole run from the factory. And they had their own testing laboratory so they could instruct the photographers what compensating filters were needed. But those days are over. Look went out, and Life will go out too.* And the future is in television and the cassettes.

*Life did suspend publication in December 1972.

Teiser: Did you do any work with Look?

Adams: I never did a job for Look. I was there once--remember meeting Merle Armitage, the art editor at the time. He and I never got along. I've met a few people I don't get along with. Might as well let it go down on tape as a fact; it's bound to come out.

Teiser: A lot of people didn't get on with him.

Adams: Well, he is a strange man. He had an enormous amount of energy. He would plan or lay out a book and then have some company do it, like Ward Ritchie, which really did the design work, but he'd take the credit. The thing that bothered me all the time was that he took credit for things he really never did. He was a kind of a promoter--a producer. And my first gripe was when he put out the first Edward Weston book--quite handsome reproductions, although the whole job, type and everything, had a Vogue magazine feeling. I wrote a criticism of it, and he never forgave me.

Teiser: What did you write it for--for publication?

Adams: Yes, it was a criticism for the Fortnightly--here were these great photographs, but they were done in this kind of a slick Vogue magazine manner which defeated Edward Weston's simplicity. But Edward Weston never got a bloody cent out of it. I thought that was terrible. Armitage would do that with people, you see. He'd say, "Well, I'll make you famous," or, "I'll get a book out for you," and so on. But I just don't like the guy--never did and never will, and I think the feeling is mutual. [Laughter] And I'm on tape too.

There are very few people I've met in my life that I really dislike. I've been very lucky--only one or two organizations I've had any trouble with. Most of the time it's been on a good, logical human basis and most people have been good. I've had a few sour moments, like working on an advertisement for the telephone company, and when we got into Virginia--and into the deep South--it was real "anti-nigra"--you know, that kind of business. And that got me down. It was very difficult.

Teiser: Did they want you to take pictures of a certain kind?

Adams: No, it had nothing to do with that. It was just their own human attitude. Had it all the time--it was an obsession, you know.

But one very amusing thing--a little town in Virginia, and the story of these ads related to "how does the telephone representative help the community." Well, in small towns--as, for instance, in an Ohio River community (I forget the name of it), this man put in a water system for them; he got pipes and he laid

Adams: it. I had to photograph an old lady turning on the first spigot in her sink--cold water. Everybody else had to go down to the town well. She was the first one that had cold water come into the house. And this was all done by a telephone employee--very carefully researched.

Well, we got to this place in Virginia where there was another telephone man. But we couldn't figure out what he did. What did he do for the community? He had a complicated job taking care of all the telephones. That wasn't the point. It finally came out that he'd helped people understand their phone bills. He'd interpret the telephone bills to them. There was a horrendous old lady who ran the grocery store and the mortuary, and she agreed to be photographed talking with him in the car--he sort of explaining things--to this weird character. We did it over and over. It was hard to cooperate. It was very hot, and the light was not right, and we had to come around and do it again. We tried to get spontaneous things--I was using a Hasselblad. And finally she says, "Well, I guess we've done all we should do. You know this is annoying my mother." And here was this old lady sitting at the second-story window; she must have been ninety or more. Our woman was seventy. I saw this woman up there glaring down on us, you know. [Laughter] What an experience! So we got out of that fast.

Then I had to get a picture of the man who was taking care of the nitrogen-measuring units--many of the cable telephone lines are filled with nitrogen at slightly more than atmospheric pressure, which keeps moisture out if there's a leak. These people have to climb the poles and take the reading, just like you would blood pressure, with a mercury device. They plug it in and they check it. Here I was out with a truck with a lifting platform. We had to get this thing done fast. We had two days to finish. And it was sleeting. I've never been so cold in my life. And this guy was all dressed up, and he was up here--he was all right at the top. And here's me with the camera--and no warm overcoat. This sleet is drifting down and getting on the lens, and I was trying to get this person working. It was a pretty good picture, though; came out all right.

And then there was another one of the cable splicer. That was done with just one tungsten lamp. That's one of my best things. It was made with a 60-millimeter Hasselblad lens down in this tunnel where he was splicing cables. He'd been doing it for twenty years; that was his job.

And the people who came here to put in our new phone system the other day--oh boy, were they efficient! They have been doing it for years. Whether they ever advance or not, I don't know, but they know how to handle cables. You'd be surprised at the complexity

Adams: of this little three-line telephone unit in this house. The control box looks like a mouse's eye view of a television set, you know--relays and everything you can think of.

Teiser: I hesitate to start a whole large new subject at this point--but maybe I should ask you about Yosemite, your workshop, that we'll be looking in on soon.

Adams: We'll be showing a series of photographs. We have an overhead projector, which can show small prints--project them on the screen. The reflected quality is not very good, but for identification it's all right.

I think it's the ideas that develop when you look at a print that are important. For instance, the man--the guard standing by the cannon--in the Brady picture. Well--how long was the exposure? How long was he standing there? Was he asked over into this particular position for composition reasons? Has somebody just said, "Stand there and hold it," you see.

"Making" and "Shooting" Photographs

Adams: There's a very interesting comment, which I'm inclined to agree with, by Ruth Bernhard, who is quite a person. She said we have all kinds of colloquial terms in photography, and one is, "I'm going to take a photograph." Now, taking a photograph is a bit aggressive. We make a photograph--that's productive. Why do we say "shoot"? That's the modern term. Why do we say "we made this shot" or "we shoot a photograph"? If we say we take a photograph, then what do we do when we operate the shutter? We expose the film. But it's common practice now--it's in the dictionary--this "shot"--that means a photograph. When you stop to think in terms, psychologically related--violence--you shoot, you have a shot, you take. As against--now what does a painter do? He doesn't do anything like that. He observes and sketches and he draws and he paints. But these aggressive terms relate to photography, as if somebody was pointing at you with a gun. And a lot of people express a certain amount of aggression through use of these terms. And a lot of inferior photographers are very aggressive people. I'm inclined to think there is a relationship there, although--I'd like a psychologist to clarify it.

When you stop and go back and think of the connotations, it really makes a lot of difference. I can't imagine Stieglitz "shooting" anything, and I don't go out and "shoot" landscapes. It's really kind of an immediate thing, you see. It's a newsman's term--you grab it, you shoot it. But it still has a very strange aggressive overtone to it.

Teiser: Would you say, "I'm going out and make photographs"?

Adams: Yes. "Let's go to Point Lobos and make some photographs." Not taking them--that was the old Indian idea--a lot of tribes in the world today have the same thing, that when you make a photograph you're taking something away of their souls, you're extracting something. Something comes from the person into the box and disappears. And the early philosophy of light was a strange illogical concept that light was like bullets--that originated in the eye, went out to the subject and bounced back!

But if you take these terms, and look back in time on them, you find that there are very strange connotations. And I suppose one would be, "I'm looking at you. I'm burning you with my gaze," and I can't do that at all. I can look at you, but I can't give you a "burning" glance, you see. And the photograph itself--it's almost fundamentally an invasion of privacy, either of people or nature. It's not a memory which you sketch; it's a thing that can be made at the moment. And that tree is my "victim," for instance. It can't fight back.

Teiser: The reaction of people to photographs brings to mind the use of the Polaroid Land camera to give people pictures immediately to reassure them, or something of the sort. Does it work?

Adams: Oh, it works tremendously well. Not for sophisticated people who know what it is--but people travel in various countries around the world and they find that some of the inhabitants are scared to death of cameras. But they make a picture and give it to the subject and immediately there's a sympathetic rapport established.

Well, a very interesting thing is what I experienced in 1928-1929 in the hill towns of New Mexico. These natives would cooperate, and we'd come back and give them a print or proof. And the native turned these pictures all around--he couldn't "read" the picture as being anything to do with reality. I mentioned that once to Margaret Mead, and she said, "Oh yes. That's very common. There's many primitive races that have absolutely no ability or understanding of translating the pictorial image to reality." Now, I am sure the cave paintings and other primitive art forms can mean something definite. But when you show primitives a real photographic image they may not comprehend.

Teiser: You mean not even another person who knew that man could believe it was his image?

Adams: No, he couldn't believe it. He'd never seen that aspect of the person.

Adams: Then another thing is, the daguerreotype was so tremendously popular because it is a mirror image, and it's the only way that people ever see themselves. You only see yourself by looking in the mirror. Now, I take a photograph of you, you're seeing you as I see you, and having seen yourself only in the mirror all your life, you may not be very happy with the result. The daguerreotype is really--that was a very important step. And it was called--I forget who used the term--"the mirror with a memory."

Printing and Papers

Teiser: You were speaking of mercury as being unstable--

Adams: It's not unstable, it's just poisonous.

Teiser: No--

Adams: Oh, mercury intensification of the negative. Oh yes.

Teiser: But isn't mercury a factor in the image in a daguerreotype?

Adams: Yes. But that's quite a different chemistry. Intensifying by mercury is simply, as I remember, building mercuric salts around the silver. It has a tendency to just dissolve, dissipate in time--the negative fades, turns a bad yellow. But you remember that in the earlier days, when you created a yellow or reddish image, you held back light, you see. And we have a thing that's called "new coccine," which has been used about a hundred years, which is a reddish dye which you can apply in different degrees to the negative. Take a shadow area and just put a slight wash of new coccine, and that will hold back the area, because the photographic papers are not sensitive to red or to green.

I was using today my Codelite, an enlarging light of both green and blue light for variable contrast papers. I can see a brilliant image on the enlarging screen with the green light, but the ordinary "graded" paper won't respond to it. It only responds to blue. Putting the new coccine on the negative will strengthen shadows, but that can be grossly overdone.

And then, of course, there's the same thing in intensifying negatives. The only safe intensifier is the Kodak In-5, which is an intensifier which actually adds silver to the existing silver image. And it is permanent. And the interesting thing is the five-solution formula. You have to mix up five different solutions--silver nitrate, elon, sulphite--then you mix up (well, I forget), but there's five different solutions you blend in different quantities, then you use that to intensify the negative.

- Teiser: Let me ask you one question that slipped down in my mind when you were talking about printing-out papers. Isn't the kind of studio proof print paper that they use now printing-out paper?
- Adams: Well, they have two kinds. They had the solio type, and you'll see it has kind of a red brick color. But now Kodak has what is called a proof-paper, which is a developing-out paper. Lousy quality.
- Teiser: But the red is a printing-out paper?
- Adams: Yes. It can be toned into very beautiful colors by various processes. It's good paper but archaic in style. When it's toned, it's as permanent as anything.
- Teiser: Is it used much?
- Adams: No. The paper stock is so bad, and I don't know what toner you'd use now--a lead acetate perhaps. This chemistry gets rather complex.
- Teiser: So it isn't worth it?
- Adams: It isn't worth worrying about now. They make a paper in England, I've been told, which is a good printing-out paper. But it requires various toning procedures.

Now, we had beautiful results at the Art Center by subjecting one of these prints to a few seconds in a hydroquinone developer, arresting development and then putting it through the regular toner. And we got a very rich tone. We never could duplicate it, I guess, because we couldn't count seconds accurately enough!

No, I don't think these things are terribly important. They get into complicated chemistry and physics, and even if we do get them clarified, they don't have much meaning, because they're always changing or being discontinued.

But the principle of the auto-masking printing-out paper still is very important. What's called a "mask" in printing--if I have a very contrasty negative, I can make a very delicate positive mask of it, or a reverse mask, on which builds up density values in the shadows. When I put mask and negative together, I get a more balanced negative. But there's always something--the edging--or the strange feeling about appropriate tonal value. I have not used a mask for years. In color, the masking is used all the time to balance different values. But if those masks don't absolutely align, it's terrible. And in most of the color reproductions you see, the masking is very bad. Because you may have illogical color effects, and you have fuzzy edges.

- Teiser: Well, I think we've kept you too long.

Adams: We got a lot of facts today. We didn't get much continuity.

[End Tape 14, Side 1]

More on Photography Workshops

[Interview XII -- 30 June 1972]

[Begin Tape 15, Side 1]

[Between the last interview session and this, several weeks passed. There was a break during which the twenty-sixth annual June workshop in photography at Yosemite under the direction of Ansel Adams was held. The interviewers attended several sessions of it.]

Teiser: We were both tremendously impressed by how interested and serious people were at the workshop.

Adams: It was a very nice group this year--very little trouble. I never have any real trouble, but sometimes we have a few people that want more or aren't getting what they expected. God knows what they expected. I think we give them more than any workshop of its kind I know of, because we begin with the setting, and then the staff is very inclusive. I thought the whole thing was very exciting. You got a lot out of it? You felt good about it?

Teiser: Yes, yes. I was interested in the range of people who attended. There were some very good young students, I thought.

Adams: A few more young people this year than there were last year. I think maybe ten more. We didn't have any repeaters--only one or two. But we had a pretty broad bunch, pretty good cross section.

Teiser: I realized that some of them were definitely there because they were interested in professional photography--

Adams: A few professional, but most of them are creative--there's a difference.

Teiser: I'm sorry; I mean photography as a vocation--not "commercial."

Adams: Well, you see, commercial work is a bad term. That means you run a studio and you do nuts and bolts and machinery and copying and all this stuff. Then you have the professional photographer who's really--he's "commercial," but he does primarily advertising or portraits--brochures, etc. Then the purely creative photographer is like the photo-poet. He does the equivalent of easel painting. And if he

Adams: makes a living with it, he's professional too. A lot of the young students are trying to find themselves, and the important thing is to develop new attitudes towards photo-appreciation, an approach which applies to all cultural effort. The other aspect of study would apply to strictly training in professional work. Too many people are being trained towards professional work that are never going to make it. There's a glut in the market. They're going to be very unhappy.

Then there's the other level which we don't know much about, which is out of my field--that's the technological--the photo science. There's instrumentation and the study of photographic science and the making of color prints, processing color, photo optics--all these really advanced technical things which are not necessary for the professional or creative photographer to know.

Dick Julian gave a fine talk on optics, and some of the kids were bored with it; they thought it was dead. "Why do we have to do that? Do you have to know how to make a piano?" "No, but I have to know how to voice a piano, and I should know how to tune it, and I should know that when I get a false harmonic something is wrong somewhere. And besides, I think it's very important to know a lot about lenses, because it explains a great many things that the average photographer suffers by not knowing. I mean, like what is focus-shift, how do you overcome it? What is chromatic aberration?"

I think all of those things are important parts of knowledge. Now, how to make a lens, or compute a lens--well now, that would be something else! I couldn't make a piano.

When I got the new car today, I said to the man, "I take that car out, and in one block I know it's a good automobile. And why? I've driven over a million miles and had many cars. I can't describe it, but I just feel perfectly at home with it." The other day I got in a car, and I wouldn't have it as a gift. My son's got a Jaguar he's mighty proud of, and for me it's a terrible automobile. It's rough on the road, it doesn't steer well, it has no room, and I feel very unfriendly. And it's a \$9000 automobile in this country! He got a good buy on it in England and got it over here through the air force. But you just can't describe those things, what the feeling is.

As soon as I got in that station wagon today--"This is it." Got a wonderful bargain. Only gone six thousand miles, and \$1200 off, and a safe car. You can look around for a month and not find anything that good.

Teiser: For someone interested in photographing as a major part of his life's work, I should think there's nothing comparable to those workshops.



Ansel Adams with students, Yosemite Photography Workshop, July 1972

Photography by Ruth Teiser



Adams: Well, there are many, many workshops. They're now practically a glut on the market. In the first place, the word "workshop" is very bad. It's not a school. We have only a demonstrating darkroom, as you saw. We usually run for two weeks or less, so we can't have a semester or a quarter--a long drawn-out program. We give them ideas in rather machine-gun fashion and demonstrations, and we hope if they take their notes they can go home and remember it and benefit.

Now, the seminar is where you have discussions. We're going to have this big one with the Friends of Photography in August, and we're having all the arts represented--dance, philosophy, poetry, painting. And everybody's going to come and rap. There'll be sessions where people will probably ask different and difficult questions. There won't be much discussion of technique. But what is technique? Technique is the application of mechanics. Well, for what purpose? You don't just go out and expose the film on a mechanical basis.

Of course, my approach with the Zone System--and everything in that direction--is a matter of visualization. You're supposed to have enough technique to "realize" your visualization.

We have the seminars. But the workshop is where we demonstrate and show prints, talk and argue. We get into some heated arguments, you know. We get somebody like Barbara Morgan who comes in with whole new ideas; Ralph Putzker presents totally different ideas. He's very much like [Edward] Kaminski who taught at the Art Center. They may not be the least bit interested in the Zone System, for instance. They're just agitating people to see.

And Brett Weston sets up his big camera, and puffs his pipe and lets people look into it. Of course, he seldom goes through making a picture. That always worried me. I like to know what you can see and how you would "realize" it.

All in all, it's a very vital thing, and I'm very pleased with it. We're going to continue it. I'm stepping out of the programs more and more. I only have three workshops I'm connected with, and maybe will get down to one. But we're going to have as many workshops, symposiums, and groups as we can manage.

The whole system of education is, you know, in quite a mess. I'm just old-fashioned enough to think that somebody at the school knows more than the student, otherwise there's no reason for the student going there. When the student starts to tell the instructor what he should be taught, it doesn't make any sense. Now, it's perfectly true that the instructor might have poor taste and less imagination. But it's presumed, as a general rule, that the teacher knows more than the student.

Adams: And in music that's very important. In photography and in many phases of the university, the students have wanted to write their own course. Well, how can they? They can say, "I want to have Black studies." I think that's wonderful. And, "I want to have something to do with contemporary economics." But they can't tell the teacher what to teach. If they could, they'd be up there teaching, you see. It isn't a matter of putting one person over the other, or of any superiority or inferiority of personality. It's just that I know more than most student photographers; that's why I'm teaching. As soon as they know as much as I do, they'd be teaching too! Of course, in a figurative way, I learn a great deal from them because of their reactions. Very often, a student will come out with a very fine solution to a problem that I'm very thankful for. But, basically, they don't know sensitometry, and they don't know a certain amount of history, and they don't know applications. So they come to the workshop to get the ideas we can impart.

Teiser: The session at which you discussed other photographers' work and showed examples to them--I was interested in how carefully they looked at the pictures and how carefully they listened to what you were saying.

Adams: That's my collection.

Teiser: Your collection of photographs, yes. And everything you said meant something to them and they stored it up until they saw the prints.

Adams: Which confirmed the ideas. That's good.

Teiser: They were thinking hard.

Adams: Well, they pay a lot. These workshops are not cheap. And some of them have an awful time paying for it. But we can't do it for less and do it well. We give them everything we can, and they'd better pay close attention. The average workshop I've been around is the most slapdash, lackadaisical--about one-sixth or one-seventh the intensity of this one. People do a lot of yakking and no work. Then there are other workshops that work very severely over a full weekend. The student goes out and makes the picture, develops the film, makes the print. Well, that's all right. But I think during that time, they could be getting a lot of ideas which they could apply later. I'm not entirely in favor of crash programs. It might be very stimulating, but when you add it all up, it's only one situation which is only partially resolved.

Minor White and his people--they do wonderful work, and they have a totally different concept from mine.

Teiser: Your discussion of the students' work, when they brought it you, I thought must have been very helpful to them.

Adams: Well, yes, I'm glad you felt that. That's very touchy because--I guess you were there when I made the prelude statement that it's unfair to really evaluate someone's work unless you know something about it and something about them. So all you can do is to first go through the prints fast. I get an all-over picture, and my computer's working and I'm not even looking carefully. I just look and follow the reactions--I like this, don't like that. You say that. Then you go back and you look closely and all you can do is try to find out what the student wanted to say and then observe how did he say it. Now why he said it, or how his personality influenced his work, we have no way of telling. And it would take me a long time to learn somebody's work and the person well enough to sit down and say.

I was interested in your reaction to the teaching because that's been a very considerable part of my life and it's been one that's very controversial, because there's more argument and dissension in the teaching world than in almost anything else. And some people teach in the most casual, off-hand way. Kaminski, who was a great man at the Art Center School, comes to mind when I think of imaginative teaching. He would get middle-western kids who'd never had a bright idea out of a church-social society. They were absolutely amazed at all the things going on. They had no imagination to begin with. They had learned a little mechanics. Kaminski takes them out to the beach and he may bring a faucet and a pipe that's been painted and dipped in white plaster. Then he has a few grapefruits, a couple of doll heads, a pipe--an incongruous collection! He finds some seaweed and junk and puts it all together and says, "Now make these things relate." They all stand there looking goggle-eyed. "What do you mean?" Well, he shows them: seaweed has a shape, the faucet has a shape, the pipe has a shape--think of a square and how the rhythm is--oh boy, they really do begin to see that there are relationships of shapes. And, while it sounds terribly corny, it still is tremendously effective.

Ralph Putzker tried that. Barbara Morgan is a very confusing speaker in the sense that she gets so vague and symbolic that nobody can ever follow her, but everybody knows what she feels, and she becomes a wonderful teacher and person. And she's always looking for these things called relationships. Well, I use a little different term, but it adds up to the same thing.

A young person who doesn't know much is more open and alive to that kind of thinking than a more or less well-trained habit-formed person who has gone to camera clubs or has read books on "rules." Now, did you go to Fred Parker's lecture that night?

Teiser: No.

Adams: Well, I wish you had, because that was very enlightening on the contemporary sense. Nine-tenths of what he showed and what he said is completely out of my world and I have little to do with it, personally, at all. But it represents very important areas of photography--like contemporary art versus Cezanne.

My trouble now with some of my colleagues here in Carmel is that they say, "Of course, you and I wouldn't do a thing like that. And of course there's no reason why you do have to like it."

But it is, you see; it exists, and therefore it has to be evaluated. And a person who isn't a photographer, but trained in art history and criticism, isn't always the right one to make those fundamental evaluations. I can get very upset about something from my point of view--"It's hideous. Why do you photograph this thing? I wouldn't." But then you stop to think, "Well, why is it hideous?" A man saw it, goes back in his psyche and his perceptions, and he creates in a certain way. And if it's done well, it's perfectly obvious something is achieved. That's why we want to get more and more people with different and contemporary attitudes.

Teiser: Are you speaking, in general, of nonrepresentational photography, or contrived photography?

Adams: Oh yes. contrived may include positive-negative images, solarized images, etc.

Teiser: Tortured pictures, in short?

Adams: Well, some may look at them as that. So I have to struggle with the dichotomy of my personal judgment and my personal work. That's why I should never run a gallery or direct an exhibit. I've done it many times and I've had to be very objective, and it's very painful for an artist to be objective.

I don't much like Cartier-Bresson. I don't get any deep reactions. I have the greatest admiration for him for what he's done, but his pictures don't move me at all. But I can't just go back and say, "They're not good because they don't move me."

It's like a lot of music. I love Bach, and I love Beethoven and a lot of Chopin. I can think of quite a number of composers that personally bore me, especially a lot of the contemporaries. I can't say that they're not good for that reason. I'm not saying I'm denying junk. Junk's perfectly obvious to everybody. But a lot of Prokofiev and Webern and some of the really contemporary things are marvelous structures, and they generally are solving their particular problems.

Adams: A lot of collectors in art collect nothing but names. I know some people that have very fine personal art collections, and the paintings have nothing more to do with their personality than I have to do with a space flight. They're collecting names, and also working through a series of values. The dealers convince them that it should be that for this Utrillo. "You can get one or two Cezannes," and the values will go up." "You paid twelve or fifteen thousand for the Utrillo and it's twenty-seven now." Or, "I can exchange it for two of these, and that will probably be an advantage," etc. And you'd be surprised; they get great pride out of it because these paintings are very good; they're tops in the field. But they don't have any feeling for them. They don't buy it like I did that little Donner ceramic by the front door, which really hit me like a ton of bricks. I thought, "That's marvelous!" and I got it. I believe it's good, but I don't say that I think it is a great work of art. I'm not an expert in judging it.

Teachers and Critics

Teiser: The man you speak of at the Art Center--

Adams: He's dead now. It was Edward "Eddie" Kaminski.

Teiser: When did you first go to the Center?

Adams: Around the late thirties--forty--

Teiser: Was it before the Golden Gate exposition?

Adams: Yes--well, it was before that, and during that. It's all mixed up in time. I went there to teach.

Teiser: How did you happen to be willing to go to Southern California to teach?

Adams: Well, I thought the Art Center School was pretty darn good, and they sold me on it.

I'll tell you one experience, though, that was really one of these turning points: at four in the morning I was loading the station wagon in front of the studio at Yosemite--all the cameras and the stuff. And it was one of the most magnificent dawns, you know--two morning stars and the sound of the water. And I suddenly stopped and I said, "Am I going away from this? Am I crazy?" And I almost started to unpack the car. Then I realized, "No, I've contracted to go there." And really, this was a very strange thing because it seemed as if

Adams: somebody was saying, "Don't, don't." Same thing happened going East; same thing happened again--it was so strong--when I was supposed to go to England a year or so ago to give a lecture. Just "no." I mean, I was tired, I had books to do, I had things to finish, I wasn't sleeping at night. And I went to the doctor and said, "I've got to make a decision." He said, "Well, if you feel that way don't go." I said, "I've got all these things to do, and now I'm supposed to go to England. How can I get out of it?" [He said,] "I'll write you a letter." So he wrote me a letter saying it was "inadvisable in your present fatigued condition to undertake anything further." And I sent a copy of my letter along to my friend in the Royal Photographic Society in London saying I couldn't do it. That wasn't a contract. It was just to let them know I could not come to give the Cox lecture (an important "funded" lecture). But I had this horrible feeling that I shouldn't go--don't!

And I had not as strong a feeling about Los Angeles, but Yosemite was like a siren enticing you back. And I often wondered if I hadn't done that, would the Zone System ever have come into being--which is a very important thing.

Teiser: Did you develop that when you were at the Art Center?

Adams: At the Art Center. And the interesting thing was that the reason that was done was because I was trained as a musician and as a teacher--the whole training was that you never allow the students to hear you or "duplicate" you, imitate you. And none of my teachers, with the exception of one which didn't last very long, ever played for me. It was a philosophic thing. I had to do my own shaping, my own expression. And it would be verbalized or discussed or criticized, but never in the sense of imitation. This teacher in Berkeley [Marie Butler] taught with two pianos and she had a marvelous responsive class and talented people, and they all sounded exactly alike. She was a disciple of E. Robert Schmitz, the French pianist, and she sounded just like him. She played extremely well, and I imitated her--played by ear. I got through with the E flat major sonata of Beethoven and it didn't sound like me at all. I've never been able to quite clear that up back to the way I want to do it. It's always been the one thing that was an imposition of style that is not mine.

But Frederick Zech, who was a pupil and assistant of Von Bülow--he was eighty years old. He could flow up and down the keyboard in chromatic double sixths--a fantastic pianistic technique. He would say to me, "Now, you know better than that. You did not crest that phrase. You did not read that *ff*, that accent. Now think of it like a cathedral--in that shape." I mean, that's teaching. Now if he had just played it, then you sit and you play it, pretty soon you disappear and it's the teacher's pattern of expression that wins.

Adams: The same thing with Minor White in photography. He dominates his students. You can always tell a Minor White student because they do work like him. They look like him. After awhile they do get out of it, and he encourages them to get out of it. But he has to teach in that sort of didactic [fashion]: "This is the way. This is what you should feel, you think--you enter into it." And that's mysticism, and "I am the guru." It's never put in words, but it's just implied. That's why he and I--he wrote a little forward to this forthcoming monograph [Ansel Adams]. We first thought we couldn't use it because it stresses a point that "in spite of doing what Adams does," he still likes what I do. But there's always that slight reservation, and everybody caught it. (It was modified for use.) I have to say, "Well, I'm not the editor. You didn't say anything wrong, or anything questionable." If anybody asked me to write a critique of Steichen, I suppose I'd be almost that bad. I mean I'd try to say, "Of course he's very important in the history of photography, but I do not react personally to him." [Laughter] Therefore, I shouldn't write it. If I have that feeling about it, I could not write a critical essay.

And I must say one thing, that when Nancy [Newhall] put on the big show in 1963, one of the photo magazines paid her husband, Beaumont, to come out and write a criticism of it. And he wrote a very scholarly criticism in which he traced my different periods and how I had developed in certain directions. He returned to New York and showed it to the editor and the editor said, "Well, I guess this is fine. But my God, man, can't you find anything wrong with it?" And Beaumont said, "The essence of criticism is not finding anything wrong. If it's completely wrong you make no comment. You just say it's a failure or don't mention it at all. Fine criticism is enlightenment. You make a comment on a work of art and help somebody to understand it."

And that's the trouble with Marjorie Mann and some of those people. They're rather belligerent and destructive. And those people are often wrong. They usually have made paranoid personal decisions which don't just hold up. Marjorie Mann is, however, a very well-read and intelligent person.

Teiser: When Alfred Frankenstein ventures into criticism of photography, which he does sometimes, is he knowledgeable?

Adams: No, not much in photography. He is much better now, but he was always associating photography with some other set of standards in art. But among all of the art critics, he was the best--I mean in terms of photography. He really did some very good criticism. Sometimes he'd go completely off the beam, because he didn't understand the medium and he'd try to relate it to a school of painting or a nonphotographic approach. Still, I have a great love and affection for him, because he really has tried terribly hard to relate photography to the other arts.

The Development of the Zone System

- Teiser: Back to the Art Center School--you taught there, then, and developed the Zone System so that students would have a system to work on their own. Is that it?
- Adams: It was a system of technique which would liberate them to do anything they wanted to do creatively. And Fred Archer and I--Fred Archer was the man who taught portraiture, and he was very sympathetic. I realize sometimes I don't give him enough credit, although I did all the theoretical work and the checking. But he made some of the first applications. It's not easy to figure out exactly what happened. Then we got the Weston meter people very much interested, and one of their men made us a mimeographed Zone System chart--exposure and density is on a \log_{10} basis, but going as sensitometry sometimes does from the center--positive numbers up, negative numbers down. And the good man, who was an engineer, forgot the 0.0 point, which is, of course, arithmetic one. So he started with 2 plus, or 1/2, and after about a month of trying to make this thing work, we suddenly realized that this man had just made a wrong graph. Nothing would come out. In the log sequence you start with 0.0, and that period doesn't mean a decimal point! 0.0 is one, and 0.3 is 2, 0.6 is 4 and 0.9 is 8 and 1.2 is 16, and so on. Then it goes the other way--same thing in minus--1/2, 1/4, 1/8. So if you leave out the 0.0, and just go minus--0.3 and plus 0.3--you have a difference of four--you have from 1/2 to 2. So we had a wonderful time of it [laughter] clearing that up.
- Teiser: But you worked out this system--systematized this principle, I suppose. It was developed for the immediate use of the students there?
- Adams: Yes, it is only applied sensitometry. There was nothing that I could invent. It's like the silver transfer principle in photography, which was known fifty years before Edwin Land invented the Land process, which is a silver transfer process. Everybody knew that silver "transferred," but didn't know how to control it. So if Land had suddenly discovered this principle, why, he might have gotten a Nobel Prize, because it would have been a new basic concept. But it wasn't, it was an old concept that nobody had ever used. Nobody had the ingenuity to make the silver transfer possible, and Land made a great contribution.

The Art Center School

- Teiser: Your students at the Art Center--they were, as you described them, not very sophisticated when they enrolled. Did they take to this eagerly?

Adams: Well, when they came they certainly weren't sophisticated, and they had a period of "filtering out," and the people who got to the second or third year had to be pretty darn good. The most important division in the Art Center was probably the industrial design department. I think it probably still is--because many of the top designers in automobile factories now are graduates of it. Advertising, commercial art, industrial design, and advertising photography; it was not a creative place. I used to have terrible arguments with Edward Adams (they called him "Tink" Adams--no relation), the director, and I finally left because he wasn't the least bit interested in what I would call the creative or poetic approaches. It was all dramatic advertising--he put great emphasis on crafts, and some of his design work is just magnificent. He had some painters who were working in the commercial art field who were terribly good--Alexander King, a great colorist. Kaminski was a painter, but he was the ideal gadfly, and he was appreciated as such. He just upset everybody, but in a very wonderful way. I mean, he just knocked the props out of conventional approaches. So that was quite a place. Now it's a foundation, a nonprofit institution. And I understand it's pretty good.

Teiser: The photographer who does great aerial work--

Adams: Bill Garnett.

Teiser: Yes. I was reading some place that he had studied at the Art Center at one time. Was that that same period?

Adams: I think so. Can't remember the people with whom he studied. And a lot of people--Charles Curley, and Eaton--they were really very fine professionals, and they taught a lot of people the basic techniques. But there's a case where Garnett is so superior to anybody who ever taught him. You know, he's really a great artist.

Teiser: Was that your first experience in teaching in an established organization?

Adams: Yes.

Teiser: And then your second would have been--

Adams: California School of Fine Arts. We set up the department. Well, I did have a class for six weeks at the Museum of Modern Art in the thirties. And I also had a weekend in Detroit.

Teiser: The Museum of Modern Art; I read that you gave a series of lectures there in 1945.

Adams: That was the class.

Teiser: I see.

Adams: I can't remember these dates.

The California School of Fine Arts

Adams: I guess we started the department at the California School of Fine Arts around 1945. The School of Fine Arts program was just after the war.

Teiser: At that time there was a great resurgence of the creative arts, wasn't there?

Adams: That was terrific. In fact, Eldridge Spencer was president of the Art Association and encouraged the formation of a photography department. I went out to the Columbia Foundation and got \$10,000 to put in a lab. Then we started interviewing students. We had one or two very productive years, in which very good work was done--fine student stuff turned out. But it was taking all my time, and I was missing assignments. Life offered me an assignment to do a Canadian story, which would have been a six months to a year job. I couldn't do it because of this school commitment.

Minor White came as a student first, and then he took over the department, and that started that particular regime.

Teiser: Was it he who started what was perhaps a fad for small photographs for display?

Adams: Yes, he made 4 by 5s, and that was my encouragement, though, because I believed students should spend a year with a view camera doing 4 by 5s, not worrying about enlargement. Just "seeing" and making beautiful prints. Edward Weston portraits were mostly 4 by 5. Scale is entirely relative.

I'm making too big prints now. I should get back to the 8 by 10s. But I have the equipment and I go to the 11 by 14, 16 by 20s. It's awfully hard to move back.

Teiser: You stayed with the California School of Fine Arts about two years--three?

Adams: At least two, and Minor took over. William Quandt, he was one of my students--he became an assistant to Minor. He was a very fine photographer. Pirkle Jones is a very fine photographer. I think he's teaching at the San Francisco Art Institute, which is the present name [of the school].

Adams: But after Minor left, as far as I'm concerned, it very seriously deteriorated. It became an "idea blender," which is good in its way, but people are turning out inferior images.

Teiser: I still see the effects of that one period, though, in exhibits, even among young photographers who are studying now.

Adams: Well, it was semiclassical. It was sort of the f/64 impact on straight photography. You never know! You can sometimes say, "Well, So-and-so started a trend," and then you really get into it and you find that it's really somebody else, some other set of conditions. But a lot of the stuff I've seen coming out of there now certainly has nothing to do with anything we stood for at that time. There's no reason it should. It's just a fact of life. The thing that does bother me is the lack of emphasis on technique, on mechanics. This simply inhibits the student from saying what he has to say. This relates to music: if you don't have a keyboard technique, you just can't play good piano! There isn't any way out of it--you can make sounds and you can probably convince a cult or a group around you that you're trying to say something, but still you can't communicate. If I can't write seventh-grade English text, no one's going to read me. And some of the stuff I see recently gives the impression of being later-kindergarten stage.

Large Photographs

Teiser: You were mentioning large prints. I think I have read that the first mural size prints you made were for the San Diego Fair. Is that right?

Adams: Yes, the Yosemite Company ordered some prints from me for the San Diego Fair. And they advanced money to put in the darkroom in San Francisco so that I could do it. Never an entirely generous attitude. I mean I had to pay for it, amortize it over several years. But I did get some fine large pictures made. Now I have a problem of getting some huge things for the Museum of Science in Boston, but I'm not going to do them myself. [Telephone rings]

[End Tape 15, Side 1]

[Begin Tape 15, Side 2]

Teiser: I took that opportunity to turn the tape. We were talking about photo murals. Would you ever have thought of making that huge print if you hadn't had that specific order?

Adams: Well, just before the war, Secretary Ickes appointed me photo muralist for the Department of the Interior, with the idea that I would go around the national parks and make photographs which could be used as big mural installations. I never thought of making the prints; I just thought of directing the making of the prints.

Now, we have to clarify something: a mural means something on the wall, and you paint a mural or a fresco. If you make a photograph and paste it on a wall, it's probably the worst thing you can do because it contracts and swells and wrinkles and curls, and the wall settles and you can have a series of catastrophes, and usually the adhesive you put it on is hygroscopic and makes it perfectly terrible--fading, etc.

So I make fine quality big prints limited in width to thirty-nine inches. We do it in the form of panels. I did make one years ago that was 12 by 18 feet--a picture of Half Dome; I did it in sections. The sections were mounted on panels and put up like a double screen with dividing lines. It was extremely effective. It still remained a good print; it was not plastered on a wall.

The only good photographic paper is forty-inch width, and of course it's impossible to process single-weight paper adequately; it's so delicate, and the basic processing and adequate washing required would crack and crease it.

There's an awful term called "blowup," which just means an enlargement "without consideration." Most photo murals are blowups. They're pretty terrible. They're usually toned (bleached and toned) in silver sulphide and come out an egg-yolk-yellow sepia [laughter], which is perfectly horrible but very permanent. That's the reason it's done. They've reduced the silver to silver sulphide, which it would naturally gravitate to if it wasn't well processed, only it wouldn't do it evenly.

I can make prints up to seventy-six inches high and thirty-nine inches wide. And I make screens--I've made five-panel screens and four-panel screens, but they have fine print characteristics. They're not just blowups. And they're also rather costly. It's a terrible job. The large print is \$2500 plus, and a screen would be about \$10,000. It would have to be--

In making a screen you first have to make your dummy, you have to know just where to divide the image, and you have to plan the divisions so that when the screen is folded you don't get a displacement of diagonal lines. You have also to consider frame and hinge space. It really is an awful job. Then you have to do it in the enlarger and scale it exactly to be sure you have the required "safe" overlaps. Then you have to plan carefully controlled exposure

Adams: and use pretty big sheets of paper for tests to get just what you want. Then when you make the screen, you expose each section in sequence and you develop them, each one in a fresh developer, exactly under time and temperature control so that they will match.

And when that's all done, you feel happy. You make at least two or three of the complete screens while you're doing it. You tone them, and you have to be sure the toning is equal. Every time you put a section through a bath it has to be a fresh bath, so I'll use up ten dollars worth of toning solution in making a screen. But, after all, time is the most important thing. And making big prints is very expensive and when you throw away--well, let's say, every time I make a large print order for that Half Dome picture--say 30 by 40 inches--I would probably use an entire roll of paper.

Teiser: How much--

Adams: Well, it's about thirty dollars.

Teiser: No, I mean how many--

Adams: Oh, I might use up eight feet. The rolls come in 40 inches by 30 feet or 40 inches by 50 feet. I can manage a 50-foot roll, but it "squeezes" my equipment. They make it in 100-foot rolls, but the trouble is now that Kodak and other manufacturers are restrictive. With certain items like Kodabromide rolls, you have to order at least \$300 worth. You see, that's what they call a restricted order. You can't just go to the store and buy them--they ship to order from the factory. And with certain films--I was trying to get some Tri-X Ortho the other day--you can't buy less than a hundred sheets. You used to buy twenty-five-sheet boxes, but there was not enough sale. So they make them in this "restricted" quantity.

Teiser: That reminds me that perhaps you know why they pack twenty-five instead of twenty-four to a box.

Adams: They got into the decimal system. And it was one of the craziest things in the world--ten (ten is all right, because that would take five film holders), and twenty-four would be good, because it would take twelve film holders--you know, two sheet films to a holder. But they decided on twenty-five. Well, when you're traveling, there's always a waste of one film. And it's partially decimal. Now, if they had twenty, thirty, or fifty, but they decided on twenty-five, and there's always a film left over when loading holders, and very seldom do you save and use it. And the film packs were then stepped up to twelve and sixteen films each. Well, that means you should expose the entire pack; you can develop eight at a time--it's pretty hard to develop sixteen at a time. It's all in the lap of the gods, because they've talked about canceling the film

Adams: packs. Film pack is the simplest way for people who work in the field with 4 by 5 cameras. But nobody can tell them what to do, and Eastman's the only one that makes them. Ansco used to, but they never learned the secret of avoiding scratches. Probably Kodak will end up by making film packs to order (maybe).

Teiser: Back to the mural--Mrs. Eldridge Spencer told us the story about a large photograph for the Mountain Room at Yosemite. She said she wanted to crop the photograph in a way that you thought was entirely wrong, and she won!

Adams: She insisted on a detailed image of Sequoia foliage. She wanted it fifty inches wide, and I could only do it forty inches. So we had Moulin make the print, and Moulin charges so much a square inch and would never think of making two prints. And I told her, I said, "I'll let Moulin do it, but it's got to be a good print." I think I insisted on three before he got it, and of course he charged for every one of them. And it added up--it was a big charge for a lousy job. She bought a group of twenty or thirty fine prints made especially for the room. Then there were some mountain climbing pictures made for the Boiler Room, which is a very good technical job--great huge climbing pictures. I don't know who did those. I think General Graphic enlarged them. General Graphic did much better than Moulin.

Teiser: Do you make a photograph with the idea of its final size?

Adams: Oh yes, that's a basic conceptual idea of what's a photograph for. Now, I do a lot of work for Polaroid Corporation, and I always think in terms of 11 by 14 or of 16 by 20 from the Polaroid negative--4 by 5. I always try to think, "Will this really enlarge? Can I make it?" I know that's what they want. I mean, they have these great rooms and halls and they want pictures of that size. So I try to think of that.

Teiser: Most of the murals that you have made or that have been made from your negatives--were the photographs taken as mural photographs?

Adams: Yes, the ones for the Park Service, many of them were done with processing that was favorable to big enlargement. I guess I had one of the Grand Canyon that was going to be twenty feet high and fifty feet long. It never has been made. And then I'd done Coloramas for Kodak--sixteen of those things, which are twenty feet high and sixty feet long, in color. But of course those were all produced in Rochester. I used my 7 by 17 banquet camera for the color film. I had lots of fun. But large size is a conceptual matter. The best photograph in the world can be on 4 by 5; "blowing it up" to a big size might ruin it for both technical and aesthetic reasons. So I have people who say, "Well, I'd like an over-mantle of a certain picture." I say, "You can't have it; it won't go that big."

Adams: I had a problem the other day. A lady--her daughter died, and she wanted to give something to her sorority at Bennington. She wanted a picture of the "Moon and Half Dome," which is from a Hasselblad negative, 2 1/4 by 2 1/4. And she wanted it to be four feet high. I asked, "How's it going to be seen? It's only from a very small negative. And if you want it four feet high--it's got to be seen from a considerable distance or it'll look terrible." We finally got it down to twenty inches high framed, and it is placed over a mantelpiece. It is seen very close, so it still looks acceptable. But if it had been forty-eight inches high, the average person would have sensed a certain grossness in it. [Telephone rings]

Well, where was I? Oh yes--the photo mural. I hate that word. I simply say I make a large fine print, and it has to have fine quality and be absolutely permanent. To get that quality, there are many things that have to be overcome, like reciprocity effects, long exposures in the enlarger, and the extraordinary amount of handling these prints have to have. They're developed and processed by rolling. You take a print six feet long and just roll it and adjust the development to give you five- or six-minute developing time. And it's rolled back and forth maybe fifteen times and maybe five times in the acid stop and fifteen more times in the hypo and five times in the rinse, then goes back to ten times more in the plain hypo, and at least ten or fifteen times in the toner and at least six times in the hypo clearing, and at least five times rinsing, and then maybe twenty-five times in the washing. So it's a miracle that the print gets out without having breaks and folds. But it has to be done that way to be permanent.

Then it has to be carefully mounted.

Photographing a Potash Mine

Teiser: To go back to the 1930s, 1936 was the year of your exhibit at An American Place. Was that the same year you did the U.S. Potash series in Carlsbad, New Mexico?

Adams: Yes, I think so.

Teiser: I think you said that Horace Albright had asked you to do that. But was that your first large industrial photography commission?

Adams: Well, I guess it was the largest I'd done. I'd done several other things, like the Shewan-Jones winery, and single pictures. But I think that potash thing was probably the largest at that time.

Teiser: The Shewan-Jones winery, while you mention it--that was a remarkable construction at that time, wasn't it? They must have been very proud of it.

Adams: That's probably the best little winery of its kind in the state. It's the first time the new equipment was brought in [after Repeal]. It's still functioning.

The Carlsbad job--that's Carlsbad, New Mexico--was a very interesting story. They wanted color photographs. I took 5 by 7 Kodachromes with an enormous amount of flash lights, and worked for days in the mine, with the men working on scaffolds and handling the big tools. And oh, the pictures came out just beautifully. And everybody was happy. And I went into Mr. [Thomas] Cramer's office, who was one of the mine foremen, and put these things up in the viewers, and he started to turn ashen gray. "We can't use these," he said, because the people had used wooden planks in the metal scaffold, which is absolutely against mining law. They were supposed to use trussed steel metal planks--aluminum, and they hardly ever did. There wasn't one that was right, one that could be used, because we were showing a violation of the basic mining safety laws. They were using 2 by 10- or 12-foot wooden planks, which sagged. These men are up there with big machines and hammers, and here's two or three together; theoretically a plank could break. I had absolutely no knowledge of this rule. The superintendent was fired. Oh boy, it was a terrible thing. They had to be all done over. That was not easy!

Teiser: Is the ore white?

Adams: No, it's wonderful amethyst--a purple amethyst color. It's very hard to photograph. The least bit of overexposure and you lose the color. So we did dress the men in shirts--warm, different-colored shirts--and there was some color. But I was surprised how the amethystine quality did come through.

Then another very funny thing, I wanted to get a picture of the plant--a great cloudy sky and the plant in the distance with its big stacks. So I found a place, and determined the right time of day. Bunches of nice clouds; it was that time of year. I went over to the engineer and said, "Now look, I've got it all figured out. About 2:30 p.m., if you can just stoke up these stacks to get the feeling of smoke in the wind--" Well, he nearly died. "Any smoke comes out those stacks," he says, "I'll be dumped off Staten Island. You know, we burn natural gas and there ain't never no smoke." [Laughter] I'd built up this fantasy of this industrial scene, but there was never any smoke. The stacks were just for a draft, and in the cold morning there was a little vapor. I've never lived that down.

Adams: But there's one note the engineer left. I was coming around to do some details, and he left this note for the evening shift. "Their (sic) will be a Mr. Adams coming to make photographs. Please be kindly and corporate (sic) to him at all times." [Laughter] But it was done with such warm feeling--

Photographing the Carlsbad Caverns

Teiser: Did you take pictures of the Carlsbad Caverns at that time?

Adams: Yes, then I went down in the big caves and did many pictures. Used up millions of flashbulbs that time. That was very difficult, because the humidity down there was almost total. The temperature was 56°. So all of the cardboard cartons of the flash globes would just come apart, and the globes would just roll out in the mud. We'd have to put these lamps in reflectors, and use an electric torch to compose the lighting, expose, set up another lighting situation, expose that, and when all were exposed, put the slide back in the holder. What we didn't realize was that the humidity was so high, and the film of the period was so sensitive to moisture, that the film would expand, and we got "double images" from sequential exposures. About two-thirds of all the pictures I did in two weeks time, with great effort, were all double-imaged.

Teiser: How did you solve it?

Adams: Didn't--I mean, I had five or six good ones; that's all I got. That was chiefly black and white--color too. But, you see, you and/or your assistant pulls out the slide and opens the shutter and takes the picture. Then you go over and connect the current to that bank and take the second picture on the same negative. Glass plates would have been perfect--a very massive tripod was used and everything carefully placed and figured. But the film would just expand with the dampness! That's what you find out through experience.

Teiser: How many minutes did elapse between your first and last exposures?

Adams: Oh, five or ten minutes.

Teiser: In that short a time!

Adams: Oh yes. Now, modern film, Estar-based film, as they call it (I think it means Eastman synthetic plastic), has what they call great dimensional stability, and it doesn't absorb water and doesn't change dimensions in the heat. But in those early days, you were just using nitrate film, and when nitrate film disintegrates, especially when it's in bulk and packed together, it exhibits a

Adams: hygroscopic effect--acquires water, and becomes nitroglycerin! So that's the great and continual danger of having the old nitrate film around. The great Cleveland Clinic disaster was due to x-ray film--nitrate base; the fire started and the film just blew up.

I have nitrate film out here, but they're all in separate envelopes and dry--no humidity problems--so they are safe.

Teiser: When you had the fire at Yosemite, was that--?

Adams: Yes, we lost a lot of negatives--they were on nitrate film. But there wasn't enough of them to explode. And they were all in separate envelopes. It's when they are packed together without separating sheets they are dangerous. I went in to see Clarence Kennedy in his office at Smith College, and he said, "You know, I've lost some of my best negatives. I've got them here in the drawer." And he opened it up, and here was a single envelope full of negatives, without anything between them at all, that had all become semi-liquefied. If anybody'd been in there with a cigarette, the whole top of the building would have gone up. I remember picking those out and saying, "If you don't mind, let's get this out of the building." And he was so surprised to find that it was really nitroglycerin. Well, not in a very pure form, but enough to really do a lot of damage. Nothing you could do to save them at all; they were absolutely ruined.

Teiser: The Carlsbad Caverns photographs, were they made for the Department of the Interior?

Adams: Yes. I worked out these two things together--the mines and the caverns photographs. I was down there for six weeks. That's where I met a lady whose husband was one of the executives of the company. She was a very fine musician. They'd been at Williamsburg--it was all Rockefeller business. He was sent out to analyze the finances of the Potash Company. She had a Broadwood piano, an English piano, which was either a piano that Beethoven had played or was a close serial number. They weren't quite sure. It had been magnificently restored, and it was a beautiful thing, and it gave the impression of the way Beethoven heard piano music. It's just amazing; there was no chance for bass octaves--the keyboard wasn't big enough. So when we play Beethoven now, like the *Hammerklavier* Sonata, you get the high octaves as written, but not the lower ones. So you just wonder what the whole concept of music was, because the instrument was totally different, and this was really authentic--it was in use around 1812, something like that.

Teiser: It was at Carlsbad?

Adams: Yes, she had it in her home in Carlsbad. They were delightful people--taught me a lot. They returned to Williamsburg later.

Teiser: I think perhaps we should let you off with a short session this evening.

Adams: Oh no, go ahead. Few more minutes. Sure, anything you want. I enjoy it. The last few days were hard because I was trying to think of all the little details and personalities--who did this to inhibit that, etc!

Well, what was your next subject? [Laughter] I love these things--it's very relaxing.

Preserving Negatives

Teiser: We mentioned the fire in the darkroom at Yosemite. You lost some negatives and you had some marred.

Adams: I'd come back from a trip with Edward Weston and Charis. Somebody came pounding at the door and said, "There's a fire in the darkroom." So we dashed out and, sure enough, there was a fire. The firemen were there, and all I could think of, of course, were the negatives. So I dashed into the center room, with hot water coming down from the ceiling, and getting soaked, and reaching for and grabbing boxes of film and pulling them out. I would rush out, throw the negatives on the ground, and dash back to get more. You know, this hot water--there was an awful lot of steam; you had to hold your breath. I saved a great many negatives, but many of them were partially charred. I remember, the last time I was in I saw that the dry mounting press, which had a porcelain switch on it--everything else was just covered with smoke, but this switch was bare. So this little German photographer [who had been working in the darkroom] had apparently left it on when mounting, and the thermostat had failed, and this started the fire. But he'd gotten in and turned it off, because it was the only thing that had been wiped off, and it was in the "off" position.

Well, then I took all the films and put them in the bathtub. You know, we had a terrific amount of stuff. And some of them were burned beyond help. This picture of Half Dome had a water mark on it on the side. We saved quite a number of things, but a lot of the pictures done for the Yosemite Company had been burned, and most of my High Sierra stuff in the northern part of the park was gone.

Well, here was this bathtub filled with film, and the insurance adjuster arrived the next day (the water was fortunately cold--I just kept putting cold water in it), and he took one look and said, "Total loss." I said, "I do have some left." He said, "Total loss"--you know, he'd realized what had really happened.

Adams: Well then, after we got all the negatives safe in the bathtub, we had nothing to do. We had a few drinks and played Bach. Poor Edward was just exhausted--flopped on the floor and went to sleep.

Nancy's got that story [in The Eloquent Light]. But the point is, a great many very valuable negatives were destroyed. Of course, some were saved. A lot that had historic value were saved, but they were in little albums. And one of the great jobs was getting them all together and re-enveloping them and retyping the identifications. There were just thousands of 35 millimeter, and the movie series I'd done of rushing water--they were very special--most of that was all gone.

Teiser: What was the movie?

Adams: It was a movie series I did of just moving water, cascades--very specially developed with para-phenylene-diamine.

The Albert Bender insurance company was simply marvelous--no haggling at all. I had about twenty-five film holders that were damaged by water. I couldn't use them again. Brett Weston said, "Well, they are salvage--50¢ apiece!" Made a check out to the insurance company. You know, he's still using them. [Laughs] They were damaged, but he dried them out. I would not trust them!

And we had two enlargers. One was damaged, the other was all right.

Teiser: Had you built that darkroom long before?

Adams: Oh, that had been built by my wife's father when they moved over from the old village in 1926 or '27--and was done primarily for photo-finishing. They developed roll films in the east cubicle and printed in the west cubicle. It was a most terrible place. But we didn't have any money to do anything, so what we did was merely reconstruct the interior. That was all burned; the outside was all right. That's the one in the picture that Edward Weston has of Ansel Adams's darkroom.* Now you ought to see the new darkroom. Well, you saw the new one.

Teiser: Yes.

Adams: Quite a change. Probably could burn up just like anything else. But this has air conditioning and pure water.

*It is reproduced in Charis and Edward Weston, California and the West. New York: Duell, Sloan & Pearce, 1940.

Teiser: Now you protect your negatives from such--

Adams: Oh, they're all out in the vault here--fireproof vault, with a dehumidifier.

Teiser: What humidity?

Adams: About 45 percent--the machine is set for that. It's been running wonderfully for ten years. I know I have to get another one pretty soon. The temperature changes so slightly, you see. If the temperature goes up, the machine automatically compensates. It's the humidity that does the harm. So we keep it around 45-50 percent relative humidity. Well, when we get cold weather, down to 55° or 60°, the humidity can go up a little. When it gets hot, the humidity has to drop. People say, "Well, that isn't very low," but if you have it too low, especially with film, the film gets brittle. We have no mold and no other problems at all.

But Weston's negatives are in kind of an outhouse construction. I get mad because I know they're really suffering from the damp. The humidity here would probably be 70 percent now. You can always tell by that drum [a large Oriental drum that is suspended above the fireplace]. The drum sounds "unk" in high humidity. If it sounds "boing," why, it's low humidity. [Laughter] You can tell.

Teiser: Weston's negatives are still intact?

Adams: Yes. He had a lot of trouble. He put them in manila envelopes, and the adhesive along the back of the envelope joint is too hygroscopic--it accumulates water, and a transfer of chemicals because of this dampness along the joining edge caused bluish-purple streaks down the back of many negatives. Some of his negatives were really quite damaged in this way, and Kodak tried to figure out ways of removing it. But the only way they were really able to do it was to use a very intense blue light, which is actinic to the paper. It's really a matter of "filtering."

When you have stains on a print that is discolored yellow, you use a G filter; in copying, the filter passes its own color, it "corrects."

I haven't had any trouble that way. I've had trouble with insufficient processing or processing in very cold weather, where the water was down to 45°, 40°, and the negatives were insufficiently washed. Some of those negatives are showing the silver sulfide effect along the edges.

Teiser: Is that that yellowing?

Adams: It's an iridescence along the edge of the negative--strange iridescent bluish-green. Nothing you can do about it--it's basic--oh, I suppose there is, but by the time you did it, you'd probably ruin the negative. The thing is to get a good print out as quickly as possible.

But that fire did a lot of damage, and yet did a lot of good in indicating that we had to protect negatives better. We are very fire conscious. One day we'd been invited down to El Portal for dinner at Doug Whiteside's home; and nobody was at our place. I said, "I'm not going to leave my good negatives alone." I packed them all in the back of the car--had several suitcases full--and went down to El Portal. That was the time that the railroad station burned up and the whole town was threatened! The fire could have come up just one more block and burned up the car and all the negatives! That would have been really fate, you know--to take it out of Yosemite to protect it, and then have this catastrophic fire. It was really quite a fire. Well, anyway, we got over that trauma!

I haven't had many other troubles. I once sat on a beautiful glass plate. One I worked terribly hard for--Tenaya Canyon, Half Dome from the east--a beautiful thing, and I sat on it. Believe me, that crunch of a glass plate!! I suppose it could have been put together and printed and all the cracks retouched out, but that was just beyond me at the time.

The Late Thirties and the Fair

Teiser: I was speaking the other day briefly to Theresa Heyman--

Adams: She's at the Oakland Museum.

Teiser: I was telling her that we were interviewing you. She knows about the oral history program. And she said she didn't have much idea of the photographic world in San Francisco about 1934 to the beginning or the build-up of World War II, and suggested we ask if you could characterize what was going on.

Adams: Well, that was the post-f/64 group work. And I think we were all developing. I mean, people were working--Imogen [Cunningham] certainly was working. Imogen could tell you much more about these things. Do you have an oral record of her?

Teiser: Yes, we do.*

Adams: Because she is really fantastic. She can remember people and things in the most extraordinary way.

We were doing jobs, and I was doing stories for Fortune. Roger Sturtevant was doing architecture, and Imogen was doing portraits. There were lots of things going on. I think it was a pretty constructive period. But I can't point out any one particular thing. The Exposition** was in 1939, and I objected strongly to the fact that the arts division had nothing of photography. There was nothing but a P.S.A. [Photographic Society of America] camera club debacle. And I told Tim Pfleuger, "For God's sake, do something about photography next year," 1940.

So they called me up and challenged me and said, "All right, we will. We'll give you space and a secretary, but not fee, and it's a hell of a job, but if you want to do it, you can take it over." Well, what could I do? I took it over.

That was a very important collective exhibit at that time.

Teiser: We brought with us the catalogue to that show, and perhaps tomorrow you would go over it and talk about it.

Adams: Oh yes, the A Pageant of Photography--I'd like to tell you about that. And the people that helped me, and the people that did not. I had a dreadful experience with a Kodak vice-president; it was typical of the photographic industry.

Photographic Industry Attitudes

Adams: But the photographic industry, with the exception of Edwin Land and Polaroid Corporation, has never been interested in photography. I'm speaking in a creative sense. The whole philosophy of this Kodak vice-president was, "What in hell does a photographer know about a camera?" But that's a whole separate story--trying to get them to put a little money up to do a wall for Kodachrome displays. That'll be tomorrow. That's too long to go into tonight.

*See interview with Imogen Cunningham, Portraits, Ideas, and Design, Regional Oral History Office, The Bancroft Library, University of California, Berkeley, 1961.

**Golden Gate International Exposition.

Teiser: I'm sure that what you say about Eastman's right, because when you look in their manuals for beginning photographers and see the examples that they're supposed to follow--!

Adams: The least common denominator. And yet they are the largest photographic company in the world. They probably have done more than anyone to perfect materials. Their stuff is the most consistent. It's very seldom I ever have a defective sheet of paper or film--very seldom, and they're very embarrassed when it happens. In the technological field, especially in the graphic arts, there's nobody in the world who's ever touched them in the technical developments. But they don't have what Land has, which is imagination. They have this tremendous laboratory--huge buildings, just teeming with Ph.Ds. But the whole approach of Land is totally different. There they begin with imagination, begin with an objective--the whole aesthetic setup of Polaroid was accomplished by art majors at Smith College, guided by Clarence Kennedy, and Ph.Ds in chemistry and physics were common. One of these girls, like Meröe Morse, would get stuck on some little problem; well then, call up an expert from chemistry or physics!

But in my field I was primarily responsible for the quality of Polaroid black and white material, especially the 4 by 5. Then along comes this tremendous new thing--the new SX-70 camera, which has millions of dollars invested already, just to R and D* the camera and film, even before the camera is produced. The whole thing is based on a small group, who are passionately dedicated and work twelve to fifteen hours a day. Kodak works on a very staid basis--what they call the typical laboratory procedure. Somebody sits there and says, "We will try the reaction of this particular organic." Two people spend a week doing that. In the meantime, Land will have three groups doing nine experiments. [Laughter] The patent for this new process is a folio about two inches thick, and with sixteen pages of organic formulas, all of which are tied into the patent, all of which can be used, and many are used. And then all the other elements of the entire system. He's gotten so far ahead in so many directions!

Anyway, Eastman ordered two hundred copies of the patent book. And probably every brain in that organization is ordered to go home and see if they can find a loophole in it.

Teiser: They all go home and say, "Why didn't we think of that first?" or something?

Adams: Well, no, it's just the fact is that in order to establish a color process, they have to avoid so many established patents. And I don't think there's a chance in the world of coming up with a totally different physical concept; of course, they might, and Land

*Contemporary slang for research and development.

Adams: would say, "That's fine," if they did it. Nobody's going to criticize that. But the interesting thing is--all of their color, even the new camera, was all in embryo in the early 1950s. At Polaroid small groups were working constantly on the problems. They have so many things that are now in the embryo stage, if you want to call it that. The instant movie will be announced pretty soon. It's been announced, but it may be some time before production. "Project India," which uses a special Polaroid print--as a printing plate already screened--wash it off and put it on a press. That's been announced. Color transparencies--they're quite far ahead with that. They tried a copier, and Land said, "Well, of course we're not interested in Polaroid trying to compete with every Tom, Dick, and Xerox." And they have an 8000 ASA speed film, where you could take a wine bottle and lay it on its side and copy the whole label; it produced that depth of field. But for some reason or other, it didn't economically work out (as yet). It was just too expensive--probably 12¢ a copy instead of 8¢. Undoubtedly another crew is working to bring down the cost.

[End Tape 15, Side 2]

A Pageant of Photography

[Begin Tape 16, Side 1]

[Interview XIII -- 1 July 1972]

Teiser: This is the catalogue for the Golden Gate International Exposition exhibit, the University's copy. A Pageant of Photography.

Adams: That's it--A Pageant of Photography.

Teiser: You told us about the beginning of the exhibit and why it was done. It sounds as if you must have done it in a trice, but it looks as if it were a show that took a long time to get together.

Adams: Well, I griped because there wasn't any photography in the 1939 Fair, and then Tim Pfleuger called me up about three months before the 1940 Fair was to open and said, "I've got a space for you, and you can't back out. We're going to go right ahead and set up a department, and you're going to run it. Period." So there was no way out of it. They gave me a secretary, and I just started contacting everybody I knew. And really, I had quite a series of names. Of course, I was able to get a lot from my local friends, but I still had to do a lot of heavy work in the East.

Do you want me to talk about any of the sources of these things?

Teiser: Yes, if you would.

Adams: [Looking at the photograph of Lola Montez by Southworth and Hawes, inside cover.] Well, I knew [the work of] Southworth and Hawes; I knew old Mr. Hawes [the son of the photographer] in Boston, and I have several daguerreotypes I got from him.

And then Walter Scott Shinn of New York gave me the other daguerreotypes. Beaumont Newhall helped in the introductions to these people. The ambrotypes were also from Walter Shinn, who had a vast collection. Now, I don't think I had the best daguerreotypes in the world, but I had some pretty good ones. But at that time, there hadn't been standards of collection of daguerreotypes established. I think one or two that I have now are even better than the ones that were in the exhibit. I didn't have the Lincoln [looking at the Matthew Brady Lincoln], but I made prints of this long after the fair. European-American photography--the David Octavius Hills shown were printed from the original negatives by [Alvin Langdon] Coburn. Coburn made very fine copy negatives because the originals were difficult to obtain. The Coburn prints are supposed to convey the real feeling of the original Hill images.

Teiser: Where were they?

Adams: The originals were made between 1843 and '48 in England.

Teiser: Where did you find the Coburn prints?

Adams: On loan from the Albright Gallery. And then the photographs of the Civil War I got from Frederick Meserve of New York City. It's all in this book.

Now, there were two volumes of photographs of the Civil War period and after--Gardner and O'Sullivan. But this particular picture that appears here ["Cliff Ruins, Canon de Chelly, Arizona"] was in the U.S. government album that Francis Farquhar gave me. I gave this to the Museum of Modern Art in New York in memory of Albert Bender. I found another copy later, a slightly inferior copy. The original was a very beautiful mint copy. Of course I was very foolish to give it away, but nobody realized their potential value. I think their pictures were originally one dollar apiece, or in that range. That book would be worth \$6500 to \$7500 at least today. And then the Muybridge*["Man Lifting Plank"] I got from the Stanford University Library. Francis Farquhar helped me with some--

Teiser: There's a listing there of a photograph on leather.

Adams: Yes, it's collodion on leather. Let's see [reading from list in back], "Unknown photographer. Photograph on Leather, Brewer Camp near Monterey, 1861." That was loaned by Francis Farquhar. And

*Eadweard Muybridge.

Adams: then we had one from the Yosemite Museum. And old William [H.] Jackson loaned me some of his, and Horace Albright and LeConte-- so we had very good support in the area of history.

Land, Kennedy, Stieglitz, Norman, and Steichen

Adams: And then stereoscopic photography. That was extraordinary, because the large polarizing viewing apparatus was developed by Dr. Land for [Clarence] Kennedy. It's a magnificent system of focussing, and these pictures were done on 11 by 14 negatives--transparencies with a lens that had a beam splitter in it.

Now, it's hard to describe what that is. The lens was a great big Schneider Xenon--and it had two stops-- $f/22$ --which were the same distance apart as the eyes. The lens was at least four inches in diameter. Now, a lens can have two apertures, and each one can cast an accurate image, because the lens is spherical. Back of these images were mirrors. They reflect the images (two mirrors at right angles) down to the two images. They obtained two 7 by 11 stereo images, which you looked at through a special viewing device. And it was absolutely incredible. The head of the Birth of Venus, for instance--you would think you were seeing under the paint! The illusion of depth was so incredible.

Clarence Kennedy arranged for that device and showed a whole series of stereo photographs, some of which he had taken at the fair here; many were taken in Europe. And thousands of people looked into this device.

Teiser: Did you know Dr. Land at that time?

Adams: Not well, that early. This was still when he was working on the Polarizer.

Teiser: Was it accidental that his interest extended to photography? Was it Dr. Kennedy who went to him, or--?

Adams: Kennedy was a professor of art at Smith, and his students were very advanced, and Land picked several of the leading researchers from Kennedy's class.

Teiser: That early?

Adams: Well no, not quite that early. They did have one come in early on the Polarizer development. But he worked with Kennedy on various projects. I don't know what the connection was, how it worked out.

Adams: But Kennedy--when he heard about the polarizing device--what it would do--he got in contact with Land and said, "I want to make photographs of the great classic works of art and really create them three-dimensionally." Land said, "Well, that's a wonderful idea," so he designed the system. And then from that time on backed Kennedy, and Kennedy backed him, and really made a great contribution. The Vectograph was a very important concept--a single image, viewed through a stereoscope, gave a three-dimension effect.

Well then [back to A Pageant of Photography], Stieglitz--I couldn't get an original. I got the gravure of "The Steerage" from Edward Weston. I couldn't get any originals from Stieglitz. They were unobtainable. But I had two copies of Camera Work, Numbers 25 and 36.

Teiser: Do you now own any original Stieglitz?

Adams: I have one beautiful Stieglitz which just came back from a two years tour, and I have a Paul Strand.

Teiser: How did you get your Stieglitz?

Adams: O'Keeffe gave it to me after he died. She said Alfred wanted me to have this.

Teiser: During his lifetime did he sell or give prints?

Adams: Very few. He put impossible prices on prints--he'd only make one or two. I don't know how many prints were sold, but it would be a very small number. And in a sense it was the same with Strand. They were very selective. They both had independent means, and that makes a difference! So Stieglitz would never sell anything under a thousand dollars, which is absolutely unheard-of for a photograph. Maybe a few people would get one, or maybe he'd give one to somebody. And all of these great exhibits he had at An American Place, 291 Fifth Avenue--he never took a cent commission; checks were always made out to the artist. In my case, I sold \$750 worth of prints at the first show, which was extremely good for that time. But the checks were made out to the artist (me), and then the buyers had to make out an extra check to the "rent fund"--Dorothy Norman, who was collecting the rent fund for the place as a nonprofit enterprise. Stieglitz never took a cent for anything.

Teiser: I was trying to remember who Dorothy Norman was.

Adams: Well, she was a very erudite woman--she's still living. She has a beautiful home on Long Island. She married Edward Norman, who was from one of the big New York families, and I guess, loaded--he must have been very, very wealthy. And he devoted himself to public works--

Adams: New York Port Authority, for example. He was that kind of man, always active. A very fine man. I have a very striking picture of him.

And she had an intellectual crush on Stieglitz which transcended anything I've ever known about. I'm quite sure it was truly intellectual, but of course it drove O'Keeffe crazy because O'Keeffe thought Dorothy would get in there and get control. So that's a very tragic episode. She has a wonderful Stieglitz collection and John Marin collection. She worked terribly hard to perpetuate the faith--keep the faith going. We became very close friends. I called her "Mommy" and she called me "Sonny Boy" and still does. [Laughter]

Teiser: She never photographed?

Adams: Yes, she did. She made a beautiful picture of Stieglitz. In fact, I have a small one somewhere--beautiful little head.

Teiser: And she wrote.

Adams: She wrote a great deal. She did Heroic Encounter. It was at a very strange mystical level which is terribly hard to understand. But, like something that Barbara Morgan does, it is a kind of self-induced mysticism, which if you accept it, you go into euphoria. If you don't accept, then you just don't get it at all!

Dorothy Norman put America and Alfred Stieglitz together and did a Stieglitz portfolio. I believe she probably made a great contribution. Just doing a work on Stieglitz in which she omitted all other photographers, because she said they weren't important, seemed questionable. Beaumont Newhall was trying to tell her that Strand and Porter and Adams were part of Stieglitz's life. And she loved them, but she thought that his contribution was just introducing contemporary art to America. And she didn't accept the fact--or didn't at one time--that Steichen had anything to do with it.

Steichen was the one who would meet all these people in Europe and get their work over to Stieglitz. Stieglitz would accept and show them. So while I have no particular admiration for Steichen, I have to admit that he made a great contribution in doing that. Nobody knew what they were doing, really, at the time.

Primitive African artists were shown [at An American Place] and early Picassos and Picabia, etc. I can think of any number of the cubists and futurists shown, but I cannot recall their names. In fact, Stieglitz gave the first showing of the new wave in art in this country. Then it moved on to the Albright Art Gallery, then the Photo-Secession. And what is that great show at the Armory in New York? It was monumental. The Armory Show.

A Pageant of Photography, Continued

Adams: Going on [in the catalogue], we had the Coburns and platinum and gum prints by Frank Eugene, Gertrude Kasebier, [Joseph T.] Keiley, [Heinrich] Kuehn, Steichen, Clarence White. Actually, there never had been anything shown like this out here before that time.

Teiser: I thought about people who might be left out, and Ben Shahn was the only one I can think of of any significance who might not have--

Adams: I tried to get him and couldn't. For some reason or other he wouldn't send anything. I had his name. There were several.

Teiser: Who were the others?

Adams: Well, Stieglitz wouldn't send anything. I had Hansel Meith and [Otto] Hagel. They were very prominent in Life. Gjon Mili, Moholy-Nagy, Man Ray, Sheeler.

Teiser: I assume you had reservations about many of those you asked to show.

Adams: Well, I had to make that decision very early, to go into two pairs of shoes. One is the museum curator and gallery person, who has to be objective, and the other's my own. Edward used to scold me for it. He said, "You shouldn't be involved in anything but your own work." I always say that no photographer should be a curator or a gallery director because he can't help but be subjective. I mean, now it would be quite difficult for me to show a great deal of contemporary work. And I know that Todd Walker is superb and some of the stuff that Fred Parker is collecting and displaying. But much is so absolutely out of my field that I really couldn't trust my reaction. But there's some of these I'd have an awfully hard time selecting, but I know if I were a museum man I'd have to.

I think [Robert E.] Heinecken could drive me nuts in time. But still, he's made a very important contribution in certain fields. It's awfully hard for a photographer to accept something that he would never think of doing or have anything to do with himself.

Now, Brett Weston is perfectly obstinate about it. The only photography he likes is his own and the people who look like him. Everything by anybody else is just sick--he wouldn't think of it. It looks like painting, or it just isn't good photography, according to him. Well, he's not running a gallery. I mean, he has a perfect right to feel as he does.

Edward was very catholic.

Adams: Of course, I got a lot of diverse pictures in the exhibit. Some people said I had too many, and I should have had a one-man exhibit. But a lot of other people had a one-man exhibit. [Reading from list] "Dassonville, Hardy, Lange, Stackpole, Weston"--is Morgan in here?

Teiser: I don't think so.

Adams: I don't think I had Barbara Morgan, no. And I was criticized because I didn't have her.

Then we had some beautiful astronomical photographs and mountain photography by Bradford Washburn.

I think it was a very good show, all in all.

Teiser: It must be the closest thing there is to a definitive view of photography in America at that period.

Adams: I would say that it probably was--and this is not being conceited--but it probably was the most inclusive show that has ever been given. And that doesn't seem to make sense, actually, because I know there's been many shows of different kinds of photography. But to put this whole thing together--everything from photomicrographs to high speed photographs, to x-ray, to color, which was very rare then--historical examples of color prints--was exciting. (We got those from the Newark Museum.)

And then we had the well-known men photographers and the women photographers of the time, Sibyl Anakeef and Alma Lavenson and Sonia Noskowiak and Marion Partridge--

Teiser: Who was Marion Partridge?

Adams: I think she was Roi Partridge's second wife.

Teiser: You have some photographs by Roi Partridge in there. I didn't realize he took photographs, as well as--

Adams: Well, Ron Partridge--

Teiser: Aren't there some by Roi?

Adams: My God, there are. He did some. They weren't very good. He recognized that fact himself; he is a fine etcher. That's right. But of course Ron Partridge is very fine; he's exceptional.

Teiser: There are essays in it that are interesting, that you must have spent a lot of effort getting people to write--

Adams: I did, and I must tell you the really funny thing. Beaumont [Newhall] wrote this article, and to him it was very important-- "Photography as an Art." You see this picture? Well, that was first reproduced small.

Teiser: What is the picture?

Adams: Clarence White, "Lady in Black with Statuette." And that was to be reproduced fairly small to allow space for text. This sheet was going through the night shift [at the printing plant], and one of the printers dropped a monkey wrench or something on the plate and ruined it. So he had to get the engraver out of bed and rush through a plate. He gave them the wrong dimensions, you see. The plate came down this size. Well, there wasn't enough room for several lines of type. So the real meaning--[reading from text] "Alfred Stieglitz received his first medal from Emerson. He too discovered that photography has its limitations." Then he went on, "Instead of accepting them as defeat, he has for over fifty years been promoting photography, trying to understand it..." and goes on and on and on, "and then overcoming the problems of photographic reproduction." Several lines of the type were left out, so it reads as follows: "Instead of accepting them as defeat, he has for over fifty years been overcoming reproduction." [Laughter]

Well, I had proofread every comma and period, and the book was released and I didn't know about this accident. Beaumont called me-- "My God, what happened?" I said, "What did happen?" He said, "I'm embarrassed, I won't be able to hold my head up. I'll never be able to see Stieglitz." I said, "What are you talking about?" He said, "Well, look at page (whatever it is) in my article, right down towards the end. Just look at that." And I read it, and it suddenly dawned on me, and I called up the printer and traced it through.

Beaumont steeled himself, went over to Stieglitz and said, "A colossal mistake has been made. I can't blame Adams, although he was responsible for the book and the printer. But look, I want to show it to you before you find it." Stieglitz read it and said, "You know, I think that's a very fine statement. Perfectly true," he said, "perfectly true." [Laughter]

So then, instead of reprinting it, they made a slip they pasted in--the correction right here on the page. And that's a faulty method because the addendum should have been up here in front, according to the rules of book making. So it was just tipped in. "He has for over fifty years been overcoming reproduction." So this is a rare book, because it doesn't have the slip in it!

It's as bad as the first catalogue of the fair that they did-- about the part relating to the Brazilian Pavilion. It read, "Go into the patio and enjoy coffee and mate"--they left the accent off [maté], you know. [Laughter] That became a collector's item in no time at all. They had to reprint that one.

- Adams: Well, anyway, I'm glad you found this. I think this was important and I think it did have--well, anything I say about how important or unique it was cannot be substantiated, but as far as I know, there was never a collection more effective for so many people.
- Teiser: There is a list in the back there of one-man shows. What did they consist of? Did they go on in a series?
- Adams: Well, you see, I had six galleries, two of which were permanent. So there were four galleries which were constantly changing--either one-man shows or group shows.
- Teiser: The one-man shows, you might comment on some of them. I was interested that you gave Rex Hardy, for instance, a whole one-man show. I didn't realize he'd done that much work by then.
- Adams: Well, he'd done a lot for Life. Pretty fine exhibit of journalistic photography. [Paul] Outerbridge--a great color man; Charles Sheeler, of course, had beautiful stuff; [Peter] Stackpole--the building of the San Francisco Bay Bridge pictures--marvelous. And Paul Strand had a one-man show; it wasn't very big and we had to space it out, but some of them were pretty beautiful. And we had to raise an extra \$25,000 insurance.
- Teiser: Will Connell?
- Adams: Will Connell. He was a "California men" photographer. Will was a teacher and advertising photographer at the Art Center School. Fred Archer was interested primarily in portraiture, at the Art Center School. And they were the leading photographers of their group. Edgar Bissantz, who lives in Carmel now--a retired architect--did some very interesting things of the period. He never advanced beyond the period.
- We didn't have a Group f/64 show--didn't pull them together. But we had--let's see, what did we do with Van Dyke?
- Teiser: There was a picture of his in the main exhibit.
- Adams: [Reading from list] "Willard Van Dyke, 'Old Buildings, Oakland, California'"--yes. Now, these prints were more or less permanent, you see. These were typical of the group. And we kept these up. And then--it's hard for me to remember just exactly what was changed.
- Teiser: Were Bourke-White's photographs those she'd taken for Life and Fortune?
- Adams: Yes.

Adams: We had [G.E.] Kidder-Smith; architectural pictures, which were beautiful. Moholy-Nagy had a whole gallery of photomontage. That made quite an effect.

In a sense, looking through this, there were many things that were extremely advanced for their time. I could point out a thousand things I missed. I didn't have [Albert] Renger-Patzsch. I wanted to get him but couldn't get them from Germany. He was the antecedent of Edward Weston, in a way. No, I tried hard to get him. He was a straight photographer, and lived in Germany, and preceded Weston in landscape and natural detail. Nothing with Weston's power, but still, some were very beautiful.

Aspects of Edward Weston

Teiser: You say he preceded Weston. Did Weston know his work?

Adams: I don't think Weston knew anything about him.

Teiser: No influence, just--

Adams: Weston didn't respond to influence much. Weston went to Stieglitz. Stieglitz apparently didn't like his work. He thought it was very cold and calculated and did not have the "spirit." But Weston felt that he did have the spirit--a different kind of spirit. But they didn't get along. And I don't understand why, because Weston was such an even-tempered and gentle person. But maybe Stieglitz just saw something he couldn't handle.

Teiser: We've just seen the exhibit of Weston's at the Friends of Photography gallery, and I can understand how someone might have. That was my reaction today. I had to get out of there after a while.

Adams: Well, it's a funny philosophy. The donor of that exhibit said, "We want a show of Weston's, both good and bad; everything he did wasn't good." I said, "We all know that. But the artist doesn't consciously show his best work." A lot of these things are just from Edward's collection. Edward might never have picked them for exhibit.

Weston's work is very dominating. And then, much depends upon the way it's hung. And trying to get these natural forms together, you do get into certain anatomical and erotic feelings, which has always bothered me a little--not because of itself, because I think it's a kind of tongue-in-cheek attitude sometimes.

Teiser: I was thinking as I looked at that exhibit that I can't associate that whole body of work with what I'd heard of Edward Weston as a man. Did you feel there was a difference, or did you know him so well that you couldn't tell?

Adams: Well, he always was an enigma. He was a very close friend, and a remarkable person. But I have to confess there was an enigmatic quality there and a certain amount of showmanship, and his finger was on the pulse of interest. The Daybook* gives the impression that he did everything under great inspiration, and I know some things were done under great calculation. You can say that of any artist. But the Daybook was a meandering sort of, I think, a therapeutic release in putting things down. My private feeling is he never intended to have it published. And then it was edited, and Nancy Newhall did a fine job of it, there's no doubt of that. It has become a kind of young person's bible now. And they see philosophy in there that they'd like to live by, and they don't know how to live by it, or maybe they can't. It's bothered me to see it in print--I hate to say that. But I think it should have been something to have gone to The Bancroft and been for scholars. There are some very wise statements. But it has a peculiar invert-pontifical quality that I never can quite accept. You may know what I mean by that--I am just using words as they come.

Teiser: It seems to me I see something of that in the photographs--a great sureness, a great certainty of himself.

Adams: But in one sense, he was very modest, and he was very liberal to other people. He used to say, "I don't care if you make a print on a bath mat, so long as it's a good print." But he never got involved in anything other than his own work. He did get a little involved politically--thought FDR was wonderful. [Telephone rings]

Teiser: Before we put this catalogue to the fair exhibit aside--it's really a good deal more than just a catalogue--you wrote in your introduction, "Color photography is rapidly coming into its own. While, as yet, it does not admit extensive creative control, the technique being both complex and rigid, we may assume that in the future we will witness exciting developments and perfections." That's thirty-two years ago.

Adams: Well, nobody's made better color pictures than Anton Bruehl or Paul Outerbridge. [Eliot] Porter is the only one of real stature. And of course they have to be well reproduced.

*Newhall, Nancy, ed. The Daybooks of Edward Weston. Volume I. Mexico. Rochester, New York: The George Eastman House, n.d.

Landscape Photography and Taste

Adams: The young person now who's really making pictures--in the illustrative field--is David Muench, who is Joseph Muench's son. He has a magnificent technique--I've seen some very beautiful things, and his reproductions are usually extraordinarily good. I'm trying to promote him in that field. He doesn't join the creative photography group, and that's a terribly difficult thing to define. You can't make comparisons, but it's like putting Rudolf Friml as against Stravinsky, or Ferde Grofé as against Prokofiev. You know what I mean--there's that other separate level, but the intention is there. And yet some of these things do contain a magnificent quality, and I think what most of the early people had and what a great number of things of mine had--an intense interpretation of the external event, as contrasted to the internal event. There are thousands of pictures taken of Death Valley, but Edward Weston was able to get something with a certain formal sense that was a unique way of seeing.

The external event, like a great landscape, can be tremendously emotional and evoke even spiritual reactions. But it is not aesthetic--it's a matter of semantics. The image of it can suggest the emotion and the qualities, and the aesthetic element is the thing that makes it art. Then you get into philosophy and confusion of words, and the fundamental principle that you cannot legalize taste or even define good taste in an ultimate sense. I mean, what is good taste?

We had that terrible trouble when we were having fights over curios in the national parks--perfectly horrible things. But they sold them and people wanted them and got something out of them. But I remember I used to write to the director of the National Park Service, "There must be something that we can do to elevate the taste of these so-called souvenirs." The answer would come back, "Define good taste from the legal point of view." You can, perhaps, define bad taste, but now it's getting very slippery even on that. But you can say pornography, but you can't--Look at that stuff on the table there that somebody sent from Africa--you must [i.e., are expected to] like it! Those are handcrafts of today; they all came broken, thank God. But they're not like the original African sculpture, and it's awfully hard to define the difference. They're clever, you know, and they're well done, and they're done by hand. But they have absolutely no clear style. They have a kind of stylization--what would you call it--an exaggeration of certain qualities which were not understood.

Teiser: Otherwise known as corruption.

Adams: It is corruption, yes--it's a corruption of style. But very few people know that. These things are just not right. We've got to put them in a box and hide them somewhere.

The Museum of Modern Art

Teiser: Well, to continue with exhibits. That same year that this was on, you worked with Beaumont Newhall and David McAlpin to start the Museum of Modern Art department of photography.

Adams: Yes.

Teiser: What was the origin of that?

Adams: Well, Beaumont Newhall had graduated cum laude from Harvard in art history, and he was appointed--which is quite a wonderful thing for his age--associate curator of the Cloisters, which was being built then. And something happened. The whole thing fell apart, and a new director was appointed, and Beaumont was out. I don't know the history of it--he'd hardly had a chance to prove himself. They just cut the staff. And he was associate curator--a young guy, not much actual experience, so he was the one that went.

Then he got the position of librarian at the Museum of Modern Art in the early days. It didn't pay very much, but he had extraordinary talent in his field, and I guess Alfred Barr or somebody knew him and recommended him. He served in that position for several years, and he'd always had a great interest in photography. In 1935 an article of mine on photography appeared in the London Studio, and he liked it. He didn't know me at all. He wrote me a note saying, "Thanks. I think it's very clear." The book, Making a Photograph, came out in 1936. He was then very excited and wanted to meet me. So he and his wife, Nancy, came out west on sabbatical for a tour and they called me up. The taxi driver had dumped them in a terrible hotel in the Tenderloin District of San Francisco. I got them a nice hotel on "the other side of the tracks." We got together and immediately became very fast friends. I remember we took a trip up to Point Reyes with Bennie Bufano and, oh, I don't know, the whole thing was very warm from the beginning.

Then I brought them down to Carmel and introduced them to Edward, and they stayed here for a while. Beaumont's interest in photography then became terribly important, and we both felt there should be a department of photography. Well, he was in no position to act; he could recommend it, but he could go just so far.

David McAlpin, who knew Stieglitz and O'Keeffe, and had bought pictures from the show I had at Stieglitz's, and I were on a trip somewhere, I think in Virginia. And I said to him, "It just seems a department of photography should be started at the Museum of Modern Art. There's no other institution that has such a thing."

Adams: He said, "Well, I talked about it, but the staff are all painters, and they don't want it." (Everywhere you go, the painting group always sabotages photography.) I said, "But look, here's a coming art, and why not take a step in advance? Here we've got Beaumont, who could be curator of photography in addition to being librarian, because he has a great devotion to photography. And I'll do everything I can. I guess you'll have to put up the money," I said. "I can't and Beaumont can't."

He said, "Well, the trustees won't appropriate it, I know that. I'm a trustee. But let me think about it." And in a couple of days he said, "You know, I'll do it. I'll give a minimum of \$5000, up to \$10,000, if you'll go ahead and organize it. Now you give me a plan."

Well, Beaumont and I got together and we organized it quickly. A two- or three-year plan, and what we could accomplish. McAlpin is the kind of a man that sensed we could do it; if he didn't trust you, he'd have nothing to do with you. But he studied this plan, and he gave wonderful advice in simplifying it and how to present it to the board of trustees. We agreed that "Adams will get a small stipend for his time and expenses, but nothing more than that." Otherwise I couldn't afford to do it. And he said, "Beaumont Newhall for the first year will take no additional salary. After that, yes." So the trustees agreed.

We forged ahead and got gallery space. And Alfred Barr was pretty good to us. A few of the museum people were very good at it--at helping--and some were very negative. But it turned out to be an important department. And then Beaumont went to the war and Nancy carried it on--a whole series of planned exhibits--and did a very good job.

Steichen, who was a captain in the navy, was bombasting around with Tom Maloney. When the war was over, Newhall and Steichen came back. Beaumont was putting things together. Tom Maloney said to the trustees, "You appoint Captain Steichen as director." Beaumont has no political force, you know--he's just a scholar. The idea was that Steichen would really put it on its feet. He'd get \$100,000 a year from industry, and "We'll make this the biggest thing that ever happened to photography." So they fired Beaumont and put in Steichen, which was pretty much of an ego blow, because Steichen then got twice as much as Beaumont got, for one-half the time, and was no scholar!

Steichen didn't get--or Maloney--\$100,000 from industry. They didn't get anything. So he started putting on spectacular exhibits like "Power in the Pacific." In fact, he did that before the war; he started on that idea before the war was over. Great big huge shows, great ugly blowups, and it was all external event pictures. And of

Adams: course the people stood in line to see it. It was very spectacular imagery, but it wasn't creative photography. It didn't have anything to do with art or the museum.

"The Family of Man"

Adams: Then he did "The Family of Man," which is the most overrated thing which has ever been done. If it had been done for the United Nations, it would have been swell. But done in the museum, it set the standard for photography, and we haven't recovered yet! The quality of the print doesn't mean anything; it's just the "idea." It's been one of creative photography's bêtes noires--an objective to avoid.

Teiser: I think it's anti-intellectual.

Adams: Yes, it is. Well, it's anti-art too, because many of these people revel in what they call non-art. They think that the great curse of photography has been its association with art. And Edward Weston got out of that; he said, "I don't care whether you call it art or not. It is, for me, what it is." But that doesn't help the outside person very much. Is it an art or isn't it? It's a craft, it's a business, it's everything--it's a language. But the poetic expression of photography is remarkable. I associate it with going to the Mission San Xavier and hearing the mass; a most spectacular effect and beautifully done, and with very good music. It's all in Latin--don't understand a word of it. But you go out with much magic in mind and heart.

Then you hear a mass done in English, which turns out to be nothing but doggerel, and it's dreadful. The same terms are there, the same meanings, but it just completely loses--to me, at least--its magical impact. People are always trying to change the King James Bible, but there's some very noble language in it. It really has sublime poetic quality in it. And they want to make it factual. They take away this one saving quality of magic, and it becomes nothing but a poorly-stated myth.

Teiser: It seems to me "The Family of Man" reduced man to its lowest biological denominator.

Adams: That's a very interesting point. As Dr. Land said, "It took photography back twenty-five years,"--if you're talking about creative photography. But you see, that same thing could have been given under the auspices of the United Nations for people talking about human beings, but not saying it is great creative work, because there were very few fine photographs in it. So when you said it brings man to his lowest denominator, that's a very good point.

Adams: That's the first time I've heard that phrase, and I think it's right. They didn't really degrade him, but it didn't give the exultation possible. It showed everybody the good folksy character that could be in, you know, advertisements.

[End Tape 16, Side 1]

Nancy Newhall

[Begin Tape 16, Side 2]

Teiser: I'd like to go back to your association with the Newhalls, which I suppose has been one of your most productive associations.

Adams: And they're my closest friends.*

Teiser: Mrs. Newhall--was she an art historian? Is that her background?

Adams: Oh no, she was a painter, a very fine painter. She graduated as a specialist in Chaucer from Smith. She painted. Some of her paintings are really quite beautiful. She made some photographs that were really very fine. Then she married Beaumont and dedicated herself to him and his career, and has extensively written on photography. She writes in a very intense, florid style which most people really love because it's got a certain definite spiritual quality. Most literary people can't stand it because it is "emotional." Somebody said to me, "Her writing is absolutely impossible. It's just emotional writing." I said, "Well, all right, it's emotional writing. Thank God for it." I mean, for a person of that type, who is creative and inspired in many ways, she is an extremely fine and precise scholar. She'd be about as good as Beaumont. She wouldn't go into the historic fields with his devotion to detail, but when she states something, she has really researched it. Several people wrote letters condemning things she said in the Teton book [The Tetons and the Yellowstone] as inaccurate, and she could answer every one of them: they were inaccurate; they'd gone to the wrong source. But she'd gone back and back and back and back, and went to Washington and went to many sources and found original documents and the letters. But you see, in history, especially of the West, someone's made inaccurate statements that are perpetuated in edition after edition of books.

*She died as a result of an accident in Teton National Park.

Adams: Same thing with photography. Statements of technique have been perpetuated for fifty years, and many are wrong. I've done my part in perpetuating, because we just took certain things for granted.

Teiser: We've been using, throughout, this catalogue for your 1963 de Young Museum exhibit in these interviews. There's a chronology and a bibliography at the back of it, prepared by Mrs. Newhall. In nothing I've asked you have you said anything that would indicate that it's not accurate.

Adams: As far as I know, it is very accurate. And now they're expanding it for the monograph [Ansel Adams] and for the San Francisco show [of autumn 1973], adding onto it. There's lots of omissions in there, but they're not of much importance. Oh no, Nancy would be accurate--and she'll scold me about dates, you know. I admit I'm a total failure for getting dates accurate, or getting them at all! You can't trust me at all for that. She'll trace right back from the first of a period, and look in a book, and find that I went on this trip and this is where I was, and that must have been the date because it was published a year after that, not before. I had a very big bibliography--bigger than I'd thought of. A lot of stuff you write, and you never remember it. Of course, maybe a lot of it I shouldn't have written!

Teiser: That'll be in the monograph?

Adams: They'll all be listed, brought up to date. But the monograph--it's a strange term to use, but it's nothing but a collection of pictures. A monograph is about one subject--doesn't it mean that? And as I am a photographer, the subject is photography. But it's not a text. Doesn't have to be text. You can have a monograph on art, sculpture--on an artist usually. But you can have a monograph, though, on style. You could have a monograph on Gothic windows. It's just it's limited to one subject, one artist, one interpretation.

Various Exhibitions

Teiser: I noticed in the 1963 catalogue that you had had a one-man show at the University of California in 1938.

Adams: Yes.

Teiser: Was that a big show?

Adams: No; it was in the old brick building. It wasn't a very good show. I printed everything too dark. I remember that.

- Adams: But then I did have a show at Alma Reed's place, before the one at Stieglitz's, in New York.
- Teiser: Yes, and I think you mentioned that as being not quite satisfactory.
- Adams: That wasn't very good at all. She was a person that would make you pay to show and make you pay for the catalogue, and if she sold enough, that was all right. But on the other hand, I guess she was right in doing it, because there was no assurance there would be any sales, and she was a commercial gallery. But she had Orozco and quite a number of very fine painters on her list, many I think related to Mexico in some way. So I never held it against her. Turnage, my manager, won't let any of my prints out now to a show at any gallery without a good juicy guarantee. If they sell, that's fine--we always protect them on that. But why should I spend two weeks putting a show together and sending it, and having some prints come back damaged, with maybe only one print sold? Now, that doesn't apply to a top gallery, you see, or to a good agent or a museum. Some of the museum shows they plan now are on the basis of the museum buying the show--
- Teiser: Oh, really?
- Adams: Of course, you then give the museum a pretty good discount--about 50 percent. They should buy the whole show. They also hold the privilege of selling prints, not from the wall, but on order.
- When I had the big "Eloquent Light" show in Boston under Director [Perry] Rathbone at the museum in Boston, there were many things sold through the Carl Siembab Gallery. Even the taxi cabs carried signs, "The Eloquent Light Show at the Boston Museum." I was all over the map. To get into one taxi cab and see one in front of you with your name on it gives you a strange feeling. Rathbone arranged with Carl Siembab to handle the sales. There was a little note that anybody interested in acquiring these were referred to the Carl Siembab Gallery, Mr. Adams's agents. There was several thousand dollars worth of prints sold in a very short time. But it's difficult for a big museum to handle it; they're not set up for that, you see. They should, maybe, for their own financial good.
- Teiser: You had photographs in "Seven American Photographers" at the Museum of Modern art in 1939?
- Adams: Yes. I think that was one of the first experiments in the Department of Photography, if I remember right. You see, it took a couple of years to get this thing going. Beaumont had arranged that. And then I had another exhibit at Yale.

Teiser: During the first trip east in 1933, we had a letter to Yale--Dean Meeks. Dean Meeks was a very charming man, rather corpulent--greeted us, took us around the galleries and then looked at my photographs. And I didn't realize it--I was so naive at the time--that he didn't know what a photograph was. I mean, to him a photograph was a picture of some work of art, or some abbey, or something. But the idea of a photograph being creative, a thing that's expressive, was totally beyond him.

So I had this picture which just happens to be the one on my screen [in the studio]. And he said, "That is absolutely beautiful. What is that of?" I said, "Well, it's taken at Mills College. Just a little natural detail." He said, "Well, that's impossible." Then I showed him some other photographs, and he came around to the fact that you could make a picture of something. But talk about being opaque--to realize that somebody would see an organized photographic composition and couldn't accept it. It must be a photograph of some work of art that somebody had done it some way and you made a handsome reproduction of it!

Well, then he got excited, and I had a show at Yale, and confounded a lot of the staff because it was the first time they ever saw photographs!

Then I got them a show of Edward Weston's, and Yale rapidly became a pretty good photographic center, and now it's very important in that field. I don't say I did it, but it's now got the Stieglitz archives and all kinds of valuable items in photography.

Teiser: Oh, does it have them?

Adams: Oh yes, a big collection. Turnage was assistant to the master of Timothy Dwight College; he was administering the Chubb fellowship. People of many different persuasions were invited to come to Yale for several days and be with the students--it was quite an experience. It was exhausting; phew, you really kept a pace!

Teiser: You were one of the Chubb fellows?

Adams: Yes, a couple of years ago I was. And Turnage wrote the program out--about three pages long. The final thing was a cocktail party, and underneath it said, "You are now a Chubb fellow emeritus." [Laughter] Oh, they had everybody from Bobby Seale to Ronald Reagan to women's lib to Jess Unruh to literary and poetic and scientific figures. The only restriction on the Chubb fellowship is that it must be somebody who relates in some way to public life and affairs. In other words, because of my conservation work and external activity, I qualified. Now, Weston wouldn't. Wallace Stegner would, as a writer but also because of his interest in history and conservation

- Adams: and people. I mean, if you're out in the public and people know about you, then you are invited and you're taken over the coals by the students. Pretty brilliant group, you know, and you have to be on your toes from morning to night. They're merciless, and that's the way it should be. They said they just took poor old Ronnie [Reagan] to pieces, but I understand he held his own pretty well--
- Teiser: I read about Unruh. He apparently did very well.
- Adams: Extremely well. Wonderfully. They should have had Paul Taylor in economics, but it doesn't make any difference whether you're socialist or fascist or communist; they want your point of view, and they'll dissect you.
- Teiser: So by the time you started exhibiting at the Museum of Modern Art, you'd had many an exhibit--
- Adams: Oh yes, I'd had Yale, and then I had an exhibit at the Camera Club in Boston, and I'd had Alma Reed's and then the Stieglitz exhibit, the San Francisco Museum, the de Young Museum. And then the f/64 and another exhibit at the de Young Museum. I can't remember all of them.
- Teiser: Was Grace McCann Morley director of the San Francisco Museum of Art in '39?
- Adams: Yes, she was. And the museum actually ran the department of art at the Exposition. Tim Pfleuger directed that.
- Teiser: Your one-man show there at the Exposition--
- Adams: It was just a one-man show; they insisted on it. I thought I shouldn't show, except maybe in a group show, and they said, "No, you have to show."
- Teiser: Do you remember anything special about your show in 1939 at the San Francisco Museum?
- Adams: Oh no, that was just a nice show. I remember I had a little argument with the curator--I wanted a Stieglitz quotation, "Wherever there is light, one can photograph," and they didn't want it up for some reason. I got mad--it was such a beautiful statement--"Wherever there is light, one can photograph." I can't imagine any more beautiful statement. I'd like to have it over my new show.

They informed me I was to be in the corridor [for the new show] and I insisted on a gallery. They wanted this for a major photographic show, along with the reopening of the museum, and I said, "I'm not going to be in the corridor." I wouldn't mind being

Adams: in the corridor with a group, if you want to show ten prints along with other people, but if they wanted a one-man show I'm not going to be shown in that corridor. So I got a nice gallery. Oh, it's tough sometimes. It was more for photography than it was for me, because I don't really worry about those things too much for myself. Sometimes in the corridor you can get more even light and you can see the photographs better, but--they're always putting photography in the corridor, in the back corner, or in a minor gallery, and photgraphy must be considered a very important thing.

The Metropolitan was very wonderful--they showed me the space and everything [before the exhibit was put together]. They wanted to give it a real impact. The big Blumenthal Court will have the standing panels with the big prints. The intimate things will be in the gallery above, and then a great big gallery, which will have "wings" inside.

Teiser: When is that going to be?

Adams: Spring of '74.

Teiser: To go on with the later New York exhibits--in 1940 then, at the Museum of Modern Art, you helped organize an exhibit called "Sixty Photographs."

Adams: Yes. That was really my show. I proposed it. I thought it would be a good thing to just take an arbitrary number--we figured the gallery space we had--and figured we'd show sixty photographs, which would go from the very beginning of photography to the most recent. It turned out to be sixty photographers. We started with what we thought was just the cream--the daguerreotype, the ambrotype, the calotype. There were really some gorgeous things in it. I think we had an original Stieglitz, original Strand, original Weston. As it got into the contemporaries like Man Ray and Moholy-Nagy, the wall ended, and there was a bay about twelve feet long and six feet deep. We painted that wall deep blue and put a light on it and hung the pictures on piano wire in space along the plane of the gallery wall. It was very nice; I was very happy about that.

Geraldine McAggy and Lisette Model

Adams: Gerrie [Geraldine] McAggy, who was the wife of Douglas McAggy (who was the director of the California School of Fine Arts), was co-director of the California Palace of the Legion of Honor. She wanted to have a show of Lisette Model's. Now, Lisette Model was a Frenchwoman--a very intense documentarist.

Adams: She photographed all the weirdies--the strange people at Nice, the gamblers, the prostitutes, the bums, the characters. Nobody has done anything comparable to her work--incredible! Her prints are absolutely brutal and grainy and hard, and they couldn't be anything else. I mean, when you see this, you get really a super-Daumier feeling.

Well, I introduced her to McAgy and, gee, she just went nuts over her. She said, "We have to have a show." Then she got all her photographs sent out, and she couldn't show them as they were because the California Palace of the Legion of Honor was very staid. Put these pictures up on the wall and--you know the probable opposition!

So she used some of these small galleries that are around the central area. And it was an absolutely inspired exhibit. She covered the walls with the want-ad sections of newspapers--just plastered them on at random and covered the entire walls. You can imagine the texture. Then they were varnished, and they took on a strange yellow color. Model's pictures were mounted against this background, and the light on them was slightly bluish. She might have gotten that idea a little from the O'Keeffe-Marin show years earlier, but it was a natural thing to do, to bring the images into space. That was one of the most effective shows I've ever seen because the pictures carried all the harshness and the brutality, and the grain was "supported" by this very small tiny type of the want-ad paper. It's that kind of showmanship that sometimes can be absolutely gorgeous. It can slip; it can be a tragedy. But in this case it was just absolutely incredible.

Teiser: I remember some people saying they used to have to take flashlights to see some of Geraldine McAgy's shows.

Adams: We had to light matches one time to see the Paul Strand show at the San Francisco Museum. [Laughter] And the Legion did have one show of South American art or something, and the lighting was really overdone. They put spotlights on the figures, and you couldn't see into the shadows. It was just too much! When you can't see anything in the shadow areas you are treating the objects unfairly.

Teiser: She did do some inspired shows, though, I thought. Many of them.

Adams: Oh yes, I agree--just great. And they were all different, they were truly individual. You go to New York now and to the Whitney Museum and you see things, in this terrible building, that all look alike.

Frank Lloyd Wright

Adams: And then the Guggenheim Museum I think is a total catastrophe--the pictures are set in cramped alcoves. [Frank Lloyd] Wright said, "We'll put them in; we'll light them." And there's a three- or four-foot incline to the back wall, so if anybody wants to see them they may fall flat on their face. People resented that. They had to install iron supports to bring the paintings forward. Then the lighting was behind them. A catastrophe!

I'd like to go on record: I think Frank Lloyd Wright is one of the greatest fakes of all time and did more damage than almost any single person that I can possibly conceive of in the whole world of art and architecture. He hated people, and he made things extremely difficult, and did some hideously ugly things and impossible architecture.

Please keep that on the tape. [Laughs] I think that the people that go around worshipping him are like people who'd go to a black mass. [Laughter] I knew him, and I've been in lots of his buildings, and I know the trouble and the disappointments it caused. And compare him with a man like Maybeck or Saarinen, who were really concerned for people. But that's a whole section; I don't want to get into that. Most of the museum people feel that they have to be loyal, just like the people at the time of the Renaissance had to be loyal to the church, because they didn't like the look or feel of the stake! [Laughs]

I've had people come up to me and put their hand on my shoulder and say, "Thank you very much. I'd never dare say that." And I say, "Well look, I'm no architect. I've been in some of the architecture, and I know the poseur and the extreme showman when I see one. He may have a most imaginative gift for design, but if the building doesn't work, it's bad architecture."

When the Johnson Wax plant, after the first storm, leaked, they called him and said, "Mr. Wright, it's leaking all over the place. We've got buckets everywhere; what are we going to do?" "Well," he said, "get some larger buckets." [Laughter]

He had built a little house for the editor of Arizona Highways to prove he could build a house for \$14,000 and, boy, it was terrific! The windows were framed in 1 by 4 fir--which warped in the heat. And the top floor was open space with a chimney--a nice chimney, went all the way up to the top, and they could have barbecues there. It was a tar paper floor, except around the hearth, and there was absolutely no pitch to the floor. It's very easy to put a one- or two-inch pitch in its base. So when they had a thunderstorm it became a puddle. It can rain considerably at times in Phoenix.

Adams: Oh, another thing he did in this same little house--he wanted to have the wife, when she was working, be able to look out on flowers. So he sunk the kitchen four feet down with an extended part of the concrete foundation. Beautiful idea, but they never waterproofed the concrete! So the water given the flowers would seep through the concrete, and mold appeared in all the cabinets where pots and pans, etc., were stored, and they were cleaning out mold all the time.

Then he did the house for two sisters from a very wealthy family. It was a very elaborate super-expensive house. A wide staircase went up to the roof--no way to close it off. You'd have a thunderstorm, a cloudburst or a sandstorm, and the house would simply become filled with water or sand! And you know, this guy's an architect! How in the world can you condone such a thing? If I give somebody a print that curls off the mount or fades--this is fundamental bad craft. Well, he just liked to show off, I guess.

There's a little house over on the beach at Carmel he built, owned by the Van Loben Sels, and two people can't pass in the hall without squeezing together. [Laughter] They lost their cook because no cook can work in the kitchen. And the windows are, oh, incredibly expensive, composed of these bronze casements--and they fill the window spaces and you don't get an adequate view of the sea, which is remarkable. It's very hard to shut off the sunlight. The sunlight pours through as well as the shine from the ocean. And the spray has caused some trouble. It has oxidized the bronze, which gives it a good color. And these people live in this thing like they're living in a piece of sculpture! But I couldn't be comfortable in it, and they're much older than I am. But they bravely stick it out. The thing is worth half a million dollars now, at least. But I wouldn't trade any Wright house I've seen--all of them together--for this place, which functions. It's just wood--but it has no "manner." Never a leak; not one drop of water has invaded this place. Except when we had an earthquake and broke the flashing around the chimney, and a little water came in downstairs. That's the only thing we've had wrong with the place. It has style and function!

I think Saarinen is pretty fine. I think the Oakland Museum is quite beautiful. I don't think they've had many troubles. I think that's one of the most beautiful buildings in the world.

I think these comments sound a little bitter, and I'm in no position to talk about architecture. But, as I say, I've been around considerable--I've been in four or five of the Wright buildings. Probably the most successful was the Marin Civic Center. It's strange outside, but when you get inside it seems to be very well planned. One of the most gorgeous buildings I have seen is the hockey field at Yale--like an inverted Viking ship hull. It's a tremendously effective auditorium. And you know, something happens there--kind of a warmth and vitality.

Civil War and Frontier Photographs

Teiser: Back to the Museum of Modern Art, the 1942 show, "The Civil War and the American Frontier." You've spoken of your work with the Brady group's negatives. Was that part of that project?

Adams: Yes--well, again, I'd have to confess that was my idea. One idea I had didn't come through. That was that since we'd had so much confusion with what was called pictorial photography, as a museum we should have a show of pictorial photography such as that sponsored by the Photographic Society of America. Just once and for all present it to the public. The museum presents folk art and all kinds of things that are not necessarily "fine" art--rather, crafts. We'd have this show selected by the P.S.A., and people then would have seen the relative aesthetic shallowness of this kind of sentimental expression. It's no more shallow than an awful lot of things that were shown, in different art forms. But I couldn't get that one by.

So then the idea was to sum up the photography of the Brady period and what Brady really was, and the people that worked with him who went on out into the frontier after the Civil War. Brady was a great promoter. He never made any photographs. There's no record of him actually making any photograph--he had bad eyes. But he ran a business, and as far as we know, he was very dignified and paid his people pretty well. His people would photograph General Grant in front of his tent and such things. He was probably there with two or three of his photographers and directing it. The only difference between him and Roy Stryker was that Stryker insisted--went out of his way--in naming the photographers and giving them credit. He lived in a different period of photography.

When a gift of five thousand Brady negatives came to the National Archives, Beaumont and I went down to look at them and pick out a few for special attention, and all of their envelopes had written on them the name of the photographer or the original signatures of the photographer.

Teiser: They were still in their envelopes from the 1860s?

Adams: Still in their original envelopes as far as we could tell. I picked out some, and I was allowed to go to Washington and make the prints for the exhibit. I also selected some Jackson photographs from the Dearborn museum, made prints of negatives, and some Ben Witticks from the Laboratory of Anthropology; also selected some O'Sullivans. We had quite an amazing group of pictures.

I think that was a very fine show, because it was the first time the public really saw these O'Sullivans and the Witticks and the Civil War pictures together in some kind of logical relationship.

Teiser: There were several books then done by James D. Horan and others, later--

Adams: Yes, [F.H.] Meserve. This show really wasn't a scholarly show because we only touched the material that was readily available at that time--most of the important images were too widely scattered. The first books that came out were really about Lincoln and the Civil War. They collected everything they could about Lincoln as a personality. The Civil War pictures are relatively dull because they couldn't do what we call "action" pictures. They'd show a lot of corpses on the battlefield or they'd show the army lined up--but there was no such thing as true action. It was all very static, and some well-known images were actually arranged post-mortem! But they had Lincoln in various and sundry situations. We don't know--some of these pictures may be copies. It's interesting that the glass plate negatives of the ones that were well known were invariably cracked--put together with scotch tape, which didn't do any good for the emulsion--because they had been used and used and accidents happened to them. The picture of the woman on Lookout Mountain in Tennessee, for instance--cracked plate. I printed that, and that was difficult. I asked, "Can't we do something with this?" but I couldn't touch it. So if I was ever to reproduce that, I would simply have that crack retouched by the engraver out of the print--

Teiser: Some museums have been, as I understand it, trying to make from old negatives the best possible print and use that as the archival record.

Adams: Well, in the first place, you have to realize most of these old negatives are extremely contrasty, because they were designed for printing-out papers. And the printing-out paper was like the solio proof paper you can get now, but it's of poor quality. Light affects the silver directly, so as the silver darkens it becomes a mask--prevents further light coming through it. The result is, when you do get the black and the white values you want, you have what would be called a linear relationship of tones. In other words, the quality is very beautiful and luminous because the steps are in linear proportion, whereas our modern prints that we make with developing-out papers show a "curve" progression of values. And the eye and mind seem to perceive this difference. The pictures I've made with Azo-O, with one-to-fifteen Amidol, did preserve to a certain extent the scale, and with the selenium toning added, suggested the quality of the old prints. But it still isn't exactly the same. There are no good printing-out papers made today that I know of. You would have to make the collodion or the albumen emulsion paper or whatever they used. I don't think there's a paper made in the world today that would give original effect, so we have to simulate it in some way. It could be done; there could be negatives made from negatives and then proportionately reduced and put into modern scale. But I've never seen anything good come out of it so far.

- Adams: I know that my Manzanar negatives may be printed glossy and hard by the Library of Congress, who now has them. I'm easy to print compared to the old boys. The pictures that you can buy are legion. You send a dollar or so to the Library of Congress and you get a picture of Walt Whitman--it's really very "icky." [Laughter] I mean, it's badly printed; it's just a likeness, it's nothing more.
- Teiser: Your Manzanar photographs were shown at the Museum of Modern Art, then, in 1944--
- Adams: Yes.
- Teiser: And I believe you said that they caused a good deal of controversy.
- Adams: Yes. They weren't accepted as works of art, and they were put down in the basement. And I'd like to say one thing just before that--the people who made the photographs in the time of Brady and the frontier were undoubtedly not aesthetically conscious. We're reading into them our aesthetic qualities. The only one that really had the thing that I would accept today as great seeing was O'Sullivan. Jackson had a few, but mostly they were just factual images.

More on the Manzanar Photographs

- Adams: My Manzanar project was a documentary series, but there were a few things in it that were emotionally potent. The Museum put them in the basement foyer, but they received a terrific amount of attention. Paul Strand was very impressed--was actually weeping. He was again looking at the subject and the situation. Tom Maloney published the book* but people refused to buy it. Many wrote letters saying it was unpatriotic. The newsstands couldn't possibly sell it, because if they had it on display, they feared they would be boycotted. I received the most touching letters from people who'd lost sons in the war--"How could you possibly support the enemy?" They'd never read it; didn't realize it was not about the enemy. The Nisei were American citizens and their sons were out there fighting along with the Yanks, but you couldn't get that fact over to them. It was quite disturbing.

I don't know. I suppose if we'd known more, we could have better said, "These are Americans," and really made it a potent idea for people. But it was a fact--they thought of them as the enemy.

In Yosemite I was practically ostracized by all the navy people: "You've been down with the Japs." Well, they'd been over there fighting the Japanese, and they didn't trust anybody. "Ain't no Jap to be trusted, no how"--that was their basis of opinion.

*Born Free and Equal.

Adams: So I really stuck my neck out on it. And--I'm very glad I did it. But it was awfully hard to explain at the time to the people that really had the contact with the enemy--to expect them to be broad enough to realize that there could be some good Japanese. Well, you know how we felt about Nazism--there isn't any such thing as a good Nazi. And there probably isn't because they have a philosophy which was very open and clear. The Japanese were for the emperor and, of course, for the war, which was a far more decent and "usual" war than the one we had with Germany. Then there was the vast racial problem. It's a big problem; it's awfully hard to define it.

I don't think I was unpatriotic in supporting a loyal American of Japanese ancestry.

Teiser: I'm only sorry that the book was, as I'm sure you remember, on poor paper because of wartime restrictions.

Adams: Oh, it was terrible paper--awful. It should be reprinted again, and it could be. The book they did on the Executive Order [Executive Order 9066. San Francisco: California Historical Society, 1972] really didn't touch what I had to say on Manzanar. It related chiefly to the tragic "exodus." That was the disaster of the evacuation, which was very bad. But I was trying to make the point of how these people were able to overcome their unfortunate situation and make a beautiful life for themselves. And I was criticized up and down because I showed people smiling. "How can they smile in the face of tragedy?" I said, "The tragedy existed, but they overcame it."

I remember when I was studying Greek with Dr. Harriot; he was an old fundamentalist minister. He was a fine teacher, but he was a rabid fundamentalist.

There's still about a hundred people who believe the world is flat. And thousands of people that think all the moon landings are television studio things. [Laughter] I've had people tell me, "You're too naive. Don't you know they can do anything now with studio effects? All that moon landing--that's all fake. That's all impossible. That was done right in a television studio." Well, I can't say that they couldn't be. You know, they could simulate that, and in fact the simulations sometimes are remarkable.

[End Tape 16, Side 2]

[Begin Tape 17, Side 1]

Adams: Another experience I had--one man was saying we'd exaggerated everything--that Hitler was really a great man and the savior of the world from Jewish barbarianism. And he said, "The idea of these millions of Jews having been exterminated is ridiculous. There was only 600,000 of them killed."

Adams: So there you go to a point when--how do you answer it? If one person is murdered, that's a crime. There's a book out that I got from, apparently, some Birchers. There's been four million copies printed. If you're a Bircher, you're ultra-conservative, you buy a lot of these and send them to your friends. But they never put the their name on them. The thing I always object to, there's never any return address. You just get these nasty tomes on a "secret basis." And this is one of these insidiously written books--you couldn't possibly believe how bad it is unless you'd read it--which proves that people like Eisenhower and Marshall were all in a Communist conspiracy. And the Morgans--all of the political figures of our time whom we consider to be conservatives, were still working for a conspiracy of world Jewish domination. It's a paperback and written in this style of boring, insistent repetition. You can imagine somebody who doesn't think at all getting hold of it and, I'm pretty sure, being hypnotized. I have a friend in San Francisco who said he considered Eisenhower to be one of the most dangerous Communists we had--totally in sympathy with communism!

Teiser: Amazing.

Adams: But that happens. What do we do? We just smile and carry on.
[Laughter]

Museums and Galleries

Teiser: In 1945 you gave a course in photography at the Museum of Modern Art. What was that designed for? Who came to that course?

Adams: Anybody interested in photography. All I wanted to do was first to see their portfolios and know they weren't rank beginners, or that they had really serious intentions.

Teiser: It was a course for working photographers?

Adams: Anybody who was seriously interested in photography, really. We apply that system at the workshops at Yosemite--we accept not only professionals, but also a lot of people interested in the journalistic aspect or just the cultural, "appreciation" aspects, and as long as they have a real interest we accept them. We did discard a lot of rank camera club people who had no apparent gift for thought or imagination. But you must go along and you ask, "Who is hopeless?" All of a sudden a spark might be kindled in somebody, and they've got enough mechanics, say, through a camera club, to suddenly realize, "What have I been doing? I haven't really explored

Adams: the potentials." They see a good photograph for the first time, a really creative work and, gee, they just blossom out. It's interesting.

Teiser: There was also a show called "Art in Progress" at the Museum of Modern Art. Do you remember that?

Adams: No.

Teiser: I think that some of your work was included in it.

Adams: Oh, I think--yes, it was a kind of survey of the arts. I had a few photographs in it.

Teiser: Then in '46, there was a major exhibit of your work at the Santa Barbara Museum. Was that of any special significance?

Adams: Just a big exhibit--well, big for that museum--a hundred prints, sixty prints, something like that. I had many of those--nothing happened; as a rule perhaps only one print's sold. I send the prints to them; they send them back. Some are damaged; most are in good shape. It's a thing we all thought at that time we had to do to just get ourselves in the public eye.

Now we still have to do that, but we do it on a little more practical basis. I suppose it really enlarges appreciation of photography.

Teiser: There are more small galleries now, I suppose, than there were then?

Adams: Oh, it's a tremendous increase in number. There weren't any small galleries. It's only in the last ten or fifteen years that there are this enormous number of small galleries--most of which fail in just a matter of a few months! They have absolutely no concept of what it means to run a gallery, all the costs and responsibilities. They have good intentions, and that's why we have to figure all the time--how can we afford to make prints to send to them?

Now, this Limited Image gallery in Chicago had a big promotion fanfare. They wanted to be Wynn Bullock's agent. They had this big exhibit. They sold \$3700 worth of prints. I was very excited, and said, "Gee, this is great." Then I received a check for \$500 saying, "Sorry, we're broke. This is all you can possibly get. And we're sending back the prints." And they didn't do what I told them to do which was not to sell the prints from the wall, to sell them on order. They sold the prints from the wall and got the money from the client--about 60 percent--and the others were orders they'd received the money for, and I was expected to make them for the clients. So they went broke; they went bankrupt. It's a matter

Adams: of fact that when they took the money in they paid the rent, the assistance cost, and the water bill and all the other things, and found they had no money left. So it's interesting. You can't write it off as a bad debt. You hadn't given them anything the IRS would consider of value. You can only take off the cost of the materials. We're trying to get that clarified now. It's pretty important to several people around here that are stuck. But that's just an example of a fairly big gallery operating on a know-nothing basis!

Others have been simply marvelous. Siembab, after this Boston Museum exhibit, paid some on account of sales, but came into very hard times and owed me \$3400 and said he couldn't pay more then but would pay when he could. After about four or five or six years--I forget the time--my gosh, I get paid. His credit rating goes up very high. I suppose I could have--if I were selling canned beans or something--demanded some interest over the period, but he just tried awfully hard and he finally got himself on his feet. Now, those are people you want to support. But these other people like the Chicago gallery put wet labels on the back of all the prints and it showed on the surfaces. (The ordinary ones that you take apart and are plastic--they're all right.) They had no right to do that on a print, anyway. That's camera club stuff. So this thing in Chicago was a total disaster.

Teiser: When was that?

Adams: Last year. So that's why we're very careful. If one of these little galleries wants a show, if it's a business, you'd go to Dun & Bradstreet or you'd get a credit reference. They want to show your stuff and they think they can sell some; well, all right, but if I'm sending twenty prints--\$4000 worth of photographs, let's say--you hope they sell. They have all the problems of putting the pictures up, protecting them, repacking them, sending them back, paying the insurance--and they still come back dog-eared or scratched. It's a very serious matter. Now, I got the Stieglitz print back after two years of circulation by the Museum of Modern Art; it was absolutely perfect. I thought they'd lost the frame and raised holy Cain; then I found that I'd taken the frame off when I sent it!! But they returned it in such a way, with such a poor label, that it got lost, and when it arrived here the only reason that Greyhound knew about it was that they recognized my name on a lot of stuff. "Ansel Adams" was written in pencil on the box, which the labels go over; it was the only identification! The whole label was torn off and every bit of identification.

Teiser: In 1947 there was a show called "National Parks, Paintings and Photographs," in the Downtown Gallery in New York. Did that contain some of your material done on the Guggenheim?

- Adams: Yes, that was one that also--I think it appeared in Fortune--criticism--Time or Fortune. There was a portfolio in Fortune, I think--paintings and photographs.
- Teiser: That was with a De Voto article?
- Adams: Yes, and that had some very fine painters in it too. Max Ernst--I'm awful for names. The portfolio appeared in Fortune.
- Teiser: You had nothing to do then with organizing that exhibit?
- Adams: No, I didn't organize that.
- Teiser: You have also permanent displays, don't you?
- Adams: I have a series of photographs in the city hall of Concord, California--quite a display--permanent. You can go over and look at it. It's all right.
- I've got the largest single display, I guess, anywhere of an individual's work in a big law office, O'Melveny and Myers in Los Angeles. There's six floors in the big Crocker Union Bank building--eighty-six pictures. Now I've gotten three and coming on four floors with the Fremont Indemnity Company in Los Angeles and their office in San Francisco. These are just pictures they buy and put up, as paintings for permanent decor.
- Teiser: The law office is in the Crocker Citizen's building?
- Adams: Yes, O'Melveny and Myers. I think they're the biggest in the West. (Next to that is Pillsbury, Sutro and Somebody in San Francisco.) But this is a tremendously big firm.
- It's just to decorate the office, and the pictures were all framed so they can rotate through different areas, and it's for the prime benefit of the staff, because very few people get in the offices.
- Teiser: Who chose those--you?
- Adams: Well, I did, yes--I suggested them, at least. But it was a Mr. James Greene who was in charge of this project and he was very good.
- Teiser: Was it a variety of subjects?
- Adams: Every one was a California scene. So were those the Fremont people chose. The Fremont offices are very brilliantly colored. The decorators got there first--very good job, very lively. But I nearly fainted when I saw these walls on which I had to put black and white pictures.

Adams: Neil Weston made the frames, which were painted one value higher than the color of the wall. It was an ochre wall, for instance; the lighter-hued frame blended the wall psychologically into the print, and they really came out very well.

Teiser: When was the Concord City Hall group installed?

Adams: Oh, that's four or five years ago.

Teiser: Did they specify what photographs--?

Adams: No, no. I showed them proofs; you always do that. I talked to the architect, then presented a plan.

Then I did a series of pictures for a little psychiatric office in Menlo Park. It was a group of psychiatrists working together. It's an office that is operated without receptionists or secretaries! You just come in and sit down, and the doctor will come out and say, "See you in a few minutes." And on the wall are these pictures which they can contemplate. They were carefully picked for their psychologically quieting value--forest scenes and little leaf patterns--things so people can come in and sit down in this room and look quietly.

Teiser: What a good idea.

Adams: Wonderful idea, yes. I think it works just fine.

Teiser: Whose idea was that?

Adams: The doctors, along with the architect. The architect thought that if they had photographs to look at it might lead them to reality. Rather than, if you're disturbed and you look at a painting and you have your doubts about interpretation--the painting could dominate. Whereas the photograph would be more related to reality. They could put themselves into the real leaves and real trees, etc.

Teiser: That's interesting.

Adams: Then I have endless over-mantles in homes, and pictures in executives' offices.

Teiser: Yes, we see them every so often.

Adams: Well, how we doing?

Teiser: Well, tomorrow we'll go on to another subject if we may, and that'll be publications over about this same period.

Adams: It's wonderful working with you, because you have everything so well organized.

Yosemite Today

Adams: As I say, I was talking to the National Park people, just trying to recapitulate the personal experiences and the trouble we had in Yosemite with the company, and the government problems, and they made a tape but that wouldn't mean anything, although they'd transcribe it. It's kind of confidential. It brings in names of people already around. This was a study of traffic situations, and what's really happened since important traffic changes were made--closed roads, one-way roads, etc.

Teiser: What was the film on that subject made by Ron Partridge called--"Cement it over and color it green," or something?

Adams: Well, that's a terrible thing. People go to Yosemite with a preconceived idea that everything stinks, the traffic is all wrong, and the concessionaires are taking everything over. What they did was typical: photograph a parking lot with a wide-angle lens and give the impression the whole valley is covered with cars. There's no human understanding at all that the American people own Yosemite and they should be able to come and see it. And instead of a constructive management as a possibility, they just condemn everything. It was a very bad film--very untruthful. But it was typical of--the general mood and feeling that's now rampant in the conservation groups, which has influenced me to get out of the Sierra Club. I didn't want anything to do with that kind of thinking. It was so irrational and unrealistic.

The way that Yosemite Valley's going now--it's just absolutely marvelous. I never saw so many people who really belong there and are enjoying it. And it's clean; it's as clean or cleaner than it's ever been.

There was something about the early days, when everything was dust, and concessionaires were fighting and providing lousy food and accommodations. There were animals staked out in the meadows, camping everywhere. Anybody who was a concessionaire was there just to make money. Now they've really gotten to the point where they are getting the larger picture. They know that if the concessionaire is to be there, if he's necessary to serve the people, he has to operate on a sound basis. For twenty years I've been saying the government should buy out all the capital investment and then lease to the concessionaire under strict control. A lot of the problems they

Adams: have is trying to pay off their investments; you can't amortize a mortgage through a bank because you don't own the property.

We had to raise \$140,000 to fix up our studio, according to the new fifteen-year contract. And there isn't any bank or building and loan company that legally could do it. So we had to put all our personal things up as collateral. Now, if you wanted to build a motel at El Portal, you'd say, "Well, we've got \$20,000--want to borrow \$150,000--twenty-year mortgage." Nothing to it, you see, because there you'd own the land. In Yosemite you don't own the land or the building. When the concession ends, in theory you're finished, although we do have equity rights, and if it was sold to somebody else the government would see we got our value back. But there's nothing that any bank could ever take over. They wouldn't be allowed to. It's a very good thing that the security is that tight. The bank can't loan a cent on anything that isn't secured.

Teiser: But it puts the concession owner in a peculiar position in between--

Adams: Very bad position. The Yosemite Company had to raise \$6 million over a certain period of years, but stock values were put up, because that way you can have certain guarantees spread over a considerable time, or you can designate your inventory or your supplies or your equipment. They've raised some money in the banks. Most of it was raised on personal collateral.

Richard McGraw

[Interview XIV -- 2 July 1972]

Teiser: We were talking to Richard McGraw--

Adams: Dick McGraw, yes.

Teiser: --this morning, and he said he had first met you in 1950 when you brought a group of students to see Edward Weston and look at his photographs. Catherine and I were talking about this afterwards and saying it was as if one well-known author brought a group of young writers to see another well-known author. Well, authors wouldn't do that, but photographers will. I can't imagine someone taking a class to see William Faulkner, for instance.

Harroun: I said Robinson Jeffers. I don't know how Robinson Jeffers was, but--

Adams: He was very kind when he wanted to be, and he could be very cold and forbidding when he wanted to be. He used to have a sign. One side said, "Not at home," and the other side said, "Not at home before 4:00 p.m." [Laughter]

But, Dick says that he met me first in 1950, but I'm sure it was before that. He doesn't remember, but I know I'd known him at the Art Center School.

Teiser: He said he was there in 1941.

Adams: Yes, I met him there, and Tink Adams, the director, E.H. Adams, talked about his work.

Teiser: He didn't talk much about his own work, really, but he did finally show us some of his carbro prints, which were perfectly fascinating.

Adams: Oh yes, he's quite a gifted character.

Teiser: His interest in photography is avocational, I gather—not professional.

Adams: Well, no. His father [Max McGraw] set him up in what's called the McGraw Colorgraph Company, and they put together one-shot color cameras and made carbro supplies. I think it went along for quite a while, but he just wasn't cut out for business.

Teiser: I gather he'd done other things earlier than that.

Adams: He'd done a lot of work in music. He's probably got the greatest collection of records and tapes in the West. He's a great music student. He knows all the dates and all the performers and all the conductors. And he has sets of comparison recordings and gives concerts for his friends. Monday nights he usually has a musical open house. He has people in for Bach—you can't tell what it's going to be. It's always very special music, things you seldom hear. And the sound effects are magnificent in that big room. You went into the big room, didn't you? The big music room with a piano, harpsichord, and clavichord?

Teiser: No, we sat in the long gallery room.

Adams: Oh, it's a room about as big as this whole house, with the speakers at the end behind a screen. It's really something. Maybe he had it mixed up because the sound man was supposed to be adding the extra 1/10 to 1 percent to his equipment; he's such a perfectionist that he never really gets anything completed. He starts out strong, and nothing is ever really finished. "The perfect is the enemy of the good." [Laughter] And he has this incredibly perfect machine, but

Adams: there's always some little thing that's not quite right, you know. But that perfectionism, I suppose it has its merits--perhaps!!

Publications

Teiser: We wanted to ask you about your major publications since 1935. Many of these we have discussed. Making a Photograph, published in 1935 in London, for one. And I think you mentioned that in 1936 you did a booklet for the Dominican College in San Rafael. We haven't seen it.

Adams: Oh yes, a Dominican College brochure.

Teiser: Did you take pictures of the buildings and classes--

Adams: I took pictures of the buildings and the place and the girls. It wasn't very inspired.

Teiser: I think we've talked about the 1938 Sierra Nevada: The John Muir Trail that the Archtype Press published. Then, in 1940 you published and published and published. One thing in 1940 that you've probably forgotten all about, though, is an article in Liberty magazine. It was called "A Chapter in the Life of San Francisco," which had "photographs especially taken for Liberty magazine by Ansel Adams," it says.

Adams: No, "Nel cor piu non mi sento." [Laughter] I distrust that "especially taken." That happens very often. People add that in when they're not sure of dates and purposes, so I wouldn't really remember. I wouldn't know.

Teiser: I imagine if this had been an assignment, you would have.

Adams: Well, you did a lot of things. You did them as well as you could but didn't think highly about most of them.

Teiser: It was in 1940 that there was the U.S. Camera Yosemite Photographic Forum, "under the personal direction of Ansel Adams," June and September, and that was the one you discussed earlier. Weston had taken part?

Adams: Weston, Dorothea Lange, Rex Hardy, etc. And that's the time we had a big enrollment. But Hitler had started the invasion, and the war was really beginning and people in the East were scared and a lot of them withdrew. We had a big eastern enrollment, but the world situation was increasingly bad and that caused a withdrawal of clientele, I guess you'd say. So it dropped down from a registered sixty to a little over thirty.

Teiser: Tom Maloney was the--

Adams: Tom Maloney was the promoter.

Teiser: Was he the instigator of that workshop? Whose idea was it?

Adams: Well, I think the idea was mine. I said, "Let's have a seminar in Yosemite." He thought it was a great idea, so he put a big splurge in the old U.S. Camera magazine about it and promoted it with typical Irish gusto. Very kind man.

Teiser: He wrote later, in a kind of reminiscent article in a U.S. Camera yearbook, that he and Steichen had put over the idea of a Guggenheim for Edward Weston. Was that right?

Adams: That's right. It could be.

Teiser: He wrote that after Weston's Guggenheim year work was completed, he had come out here, and you brought him from San Francisco down to see Weston, which was his first meeting with him. And that you and he suggested that the book, California and the West, be put together. Is that right?

Adams: That's almost right. Let's see, who published California and the West? I've forgotten.

Teiser: Duell, Sloan & Pearce.

Adams: Well, Tom Maloney was at a convention, and apparently had had a big night on the town, and I was supposed to pick him up at eight. We had to get him in the shower bath, the cold bath, for about half an hour, and he finally came to and didn't feel very well until he got down here, and had some coffee and then perked up. He and Edward became very close friends. So I think what he did was to encourage this book, and I don't know why he didn't publish it. I guess it was the type of book he wasn't publishing. I guess he just found a publisher.

I think the reproductions were mediocre.

All these things have ramifications--which you do or you don't do--what a publisher can do; or he can't make decent financial arrangements because he isn't set up for certain kinds of books. It gets very complex indeed.

Teiser: That book sold and sold; it should have brought Edward Weston decent royalties.

Adams: I think they divided up the royalties between Edward and Charis [Weston, who wrote the text].

Adams: You see, it's so tricky, unless you know and have an agent or a lawyer or somebody, because basic royalties are usually 10 percent of retail. Under all normal conditions, that's what it should be. A book sells for ten dollars, the author gets one dollar. A lot of the books cost a great deal of money because they're full of pictures, or other problems of production. And those books very often yield royalties on what they call 10 percent of invoice, which means that the author gets 10 percent of what the publisher takes in, which means anywhere from 40 to 55 percent off, depending on distribution and/or direct retail, and so on. It usually adds up to around 50 percent or 5 percent of retail. Now, if you can sit right down ahead of time, you'd say, "No, I want 10 percent of retail." That means then that they have to increase the cost of the book. It can be a very tight situation. Publishing is based usually on the principle that you can't spend more than one-fifth or 20 percent of the retail price of the book in producing it. That means paper and ink and printing and plates and binding and jacket--all the things that go into the physical completion of the book--and royalties! It should never exceed 20 percent.

One of the reasons why the Sierra Club books were such an awful loss was that we went up from five dollars cost, which is 20 percent of a \$25 book, to eight and nine, and instead of 5 percent on promotion it was 10 or 15 percent. It's just that every book cost us about one dollar loss. It was a terrible financial debacle.

Well, such things have to be watched. The club paid Dave Bohn to go to Alaska and do his book on Glacier Bay, and they advanced him \$7500 for expenses. Now, several trips up there cost a little more than that, actually, but he made out. That should have gone into production costs of the book. But when Bohn comes back he asks, "Well, what about my royalties now?" They say, "Oh, you got \$7500 advance royalties." Well, he didn't; he got \$7500 advance expenses. So you see, if you took, then, \$7500 extra cost and printed seventy-five hundred books, it would add one dollar to the cost of the book and five dollars to the retail price. Now, if you do fifteen thousand books, it might add 50¢ to the cost or 2 1/2¢ to the retail price. That's one of the things that's very hard for people who do not run publishing businesses to understand. A person who isn't careful can get an advance on royalties to do a book, and all he gets in the end amounts to expenses. His royalties should relate to his time.

You see, if I have my pictures and I take them over to the Sierra Club and they do a book, well, I'm perfectly content to have the standard royalty because I'm not out of pocket for anything but making the prints. But if they say, "Now, go down to Baja California and do us a book," well then, I have a real expense, and

Adams: such may very easily match all the royalties I'm going to get out of it. Publication theory is very important. I mean, you add a dollar for royalties to producing a book--that means you might have to reduce the size of the pages, you might have to reduce the number of illustrations in order to bring it within line. So they usually start out by saying, "Is this a \$25 book, or a \$30 book, or a \$20 book?" and then work back from there. But you see, the dealers get 40 percent off, and then distributing the book is another 15 percent, no matter how you look at it. Whether you have your own distribution office or whether you hire a distribution firm, it's going to come up to about 15 percent, because the distributors have to travel, add their time, and make their profit.

If you do it yourself, like Houghton Mifflin, you have to employ a staff and have big central offices, and that means traveling around to all the bookstores with a little briefcase with all kinds of lists of what the new books are and how they're going to sell. So the dealer then orders. It's very different from mail orders unless you're very well known and have a select group, because the number of books published today is absolutely astounding!

In the old days a bookseller like Paul Elder would have what amounted to a small library. When you'd ask for Muir or a copy of Thoreau or LeConte's geology, he'd probably have one or two copies out on his shelves and, on a sale, he'd immediately order another one.

Now, if you'd have all the modern books on hand, you'd have to have a large warehouse. So the book publishing business is one of producing, promoting, selling, and remaindering. "Remaindering" means after you get to a certain point of inventory and sales drop off, you just get rid of them at cost or less. And there are remaindering houses, like Marlborough and such people, who take over remaining copies and sell at a very low figure.

Teiser: I have a lot of photography books which I bought as remainders that are now worth more than the original prices.

Adams: Surely. Yes, if they're out of print, then they're increased in value.

Teiser: But so many still are remaindered.

Adams: Well, you print ten thousand copies and if you have an audience of eight thousand, you're out two thousand; so all you try to do is get back the basic cost.

Adams: Now, the My Camera in Point Lobos* did not sell. It was only a \$10 book. That was remaindered by Houghton Mifflin and it was sold for \$3.80. I think they paid \$1.45 for the book, which was less than cost. Theoretically, it would be a \$2 book at cost. But Houghton figured out the interest and the storage space cost, a whole technique to keep a flow of books going.

If we had been sensible in the Sierra Club and printed twenty-five thousand copies on many of the books, we'd have come out all right. But, you never know in advance. You could do twenty-five thousand for a certain book and it will be a dull thud--like the Galapagos book. They put it out in two volumes, against everybody's advice. That's been the sourest dull thud lemon that anybody could imagine—a \$55 book for the two volumes. I haven't seen the recent list, but they didn't even get their cost back on it. And they never will--it's just too expensive. It'll be remaindered for maybe \$5, and somebody will sell it for \$2, and then it'll be all out of print and unobtainable, and then it will become valuable, but not at any benefit to [Eliot] Porter or to the Sierra Club!

It's something like the history of motels. Somebody puts out a lot of money and builds a motel, which may fail in two or three years because it can't keep up its mortgage payments. The bank takes it over and sells it to another party, and they assume the mortgage and they try to run it and it doesn't work, so they sell it. By the time it sells about three times, it's down to a value in which the income may carry it.

And of course one very sad trick I've heard a lot about is that a lot of people, with really very considerable means, will put their money into things they know are going to be failures and take an income-tax loss. Some think it's the best way to reduce your income taxes--to take a major loss. Then somebody else comes in. The thing cost a million; they buy it for \$600,000. They can't make it go and they sell it. Finally somebody gets it for \$250,000, and it's all right; they can pay. The whole finance structure is just unbelievable.

Teiser: Are books ever published with the idea of remaindering some? Is that ever in the plans?

Adams: I don't think so. But I think the chances are always there. You see, if you reduce the number of the edition, your unit costs go up. So there's no sense in printing five thousand books, we'll say, if the unit cost might be \$4 a book. That would be a \$20 book. If you print ten thousand, it might be a \$12.50 to \$15 book. Now, if you knew who was going to buy it, then you know that remaindering cannot make money. The only thing is that if you print a large number, you might remainder for almost cost, and then you'd be all right in a way. You still wouldn't make anything. It's a pretty cut-throat business, and it's very carefully calculated.

*By Edward Weston.

Teiser: Have you had other books remaindered?

Adams: Yes, The Land of Little Rain was remaindered. And that was a breach of contract, because the author always has the first right to acquire remaining copies. They offer you that and if you don't take it, then they remainder. That was in the contract. At Houghton Mifflin they slipped, and they remaindered it. We could have sued them, but we knew it was an accident. But I wish I'd gotten those five hundred copies because I would have gotten them for remainder price and could have hung onto them to our advantage.

Teiser: Have there been others?

Adams: I think the John Muir Yosemite and the High Sierra--a few copies were. And Weston's My Camera in Point Lobos. The other books-- Yosemite [My Camera in Yosemite] and the national parks [My Camera in the National Parks] weren't. Well, I can't think of any others.

Teiser: To go back again to an earlier publication of yours, the Complete Photographer was published by the New York National Educational Alliance.

Adams: That was Willard Morgan--a kind of an encyclopedia. I had some articles in that, and in several other things of that kind. I just can't remember them. You probably have them.

Teiser: Yes, there were four in the Complete Photographer: "Architectural Photography," "Geometrical Approach to Composition," "Mountain Photography," and "Printing." They were like encyclopedia articles, were they?

Adams: I'd say just moderate length. I haven't thought of them for years.

Teiser: In 1940 you did the first Illustrated Guide to Yosemite Valley.

Adams: Yes, with Virginia.

Teiser: How did you happen to do that?

Adams: Well, we thought we needed a guide, and it was a matter of just putting it together. Of course, we had the knowledge and the facts, but what really took time was the actual mileage checks, and checking back and forth with the government, and then the checks of the fauna and flora with naturalists. I liked the maps we had. They were very stylized, simple maps.

It was originally published by H.S. Crocker in 1940. Then when the Stanford Press published it, they took all those out. Somebody said they weren't easy to read--but they were far easier than the

Adams: awful maps they put in! They just couldn't understand a stylized diagram, which really can be very simple.

[End Tape 17, Side 1]

[Begin Tape 17, Side 2]

Adams: Well, after the Illustrated Guide to Yosemite Valley was taken over by Stanford it was then taken up by the Sierra Club.

Teiser: Do you like that edition?

Adams: I don't know how up-to-date it is. We had to correct some things in it, but that always happens with new editions. That's not criticism of a book of that kind. You have to update constantly.

Teiser: Has it been updated in each edition?

Adams: I don't know. We haven't done it. I ought to look it over. There's just so much to do!

Teiser: Then, the next book of yours was Born Free and Equal, which we have discussed.

Adams: Tom Maloney, yes.

Guggenheim Fellowships

Teiser: Then came your first Guggenheim fellowship. Had many photographers had them between Weston and you?

Adams: I think I was the third. I think Dorothea Lange got number two, and then I did.

Teiser: Did someone suggest it to you, or did you just decide it was a good time for you to apply?

Adams: I just applied for it. The idea of the country's national parks and monuments. Then the second one was a continuation of that, and the third one was for printing from the negatives, and out of that came the big 1963 exhibit. Then many photographers have received them since then. Liliane De Cock got it one week after she got married; after five years of applications it finally came through! It's really very interesting how things come to pass sooner or later.

Teiser: Did you get it the first time you applied?

Adams: Yes, I got mine all the times I applied. But then, I was pretty well known. It's when a person is not known that they gravitate to somebody they know about or who has big sponsors.

Teiser: Do you have to spend a full year on that?

Adams: It's all very indefinite. I asked for each one to be two years because of a seasonal problem with the parks, and that was okay.

Teiser: So in fact it was six months of the year for two years?

Adams: Yes, but all they're interested in is results. They don't watch the clock.

Teiser: Does the fellow feel that he must give a year's time to the project?

Adams: Well, the major part of the time. If you're a professional, you have to continue your own work. If you're a professor at a college, you usually try to fit it into a sabbatical, or just do it part-time. Just tell them, "I've only done half of it. I'll continue next year." There's just so much money for it.

Teiser: So actually, since you were awarded one in '46 and one in '48, you were working right straight along?

Adams: Yes. Sometimes you work terribly hard for an intensive period, and other times you go along for weeks when nothing happens. It's not the kind of thing you can put on an hourly basis.

Writers always tell me they write four hours a day. I have my doubts. I understand a musician practicing many hours, but I don't know whether a musician could compose four hours a day, day in and day out.

Teiser: Some of a writer's time is spent cleaning the typewriter. [Laughter] I mean there's lots of little things you can do.

Adams: Looking up funny words in the dictionary. [Laughter]

Teiser: What was the project? Would you explain a little more about it?

Adams: Just photography of the natural scene in the national parks and monuments. A continuation of the photo-mural project, which the war terminated and which wasn't revived after the war. They didn't have the money and they weren't interested.

Teiser: Did that take you to Hawaii and Alaska then?

Adams: Yes, I was all around.

Teiser: Did you get to every park and monument?

Adams: Well, I missed the Everglades and Isle Royale. I didn't want to go there. I missed Hot Springs--that's an awful place! And I missed quite a few national monuments. But I hit all the major parks and all the major monuments. I missed Devil's Tower and a few historical places. I didn't do so bad.

Teiser: You had tremendous travel expenses!

Adams: Yes, and I got a little more for that--you write that out and make the request for them. They're very generous that way. Writers usually get it if they have to travel. They go to Europe or England and do research on Henry VIII or somebody, you know. But their other expenses are just primarily ribbon and paper and so on. But a photographer's different. And a lot of scientific work is different because you've got to go to so many institutions and study apparatus and methods. But painting isn't too expensive. I guess photography could be about the most expensive of all: equipment, insurance, and materials cost.

Sculpture could be expensive, if you wanted new materials. Of course, whether or not if you're a student, doing heavy research in medicine, whether you can go to institutions without a fee--that's another thing. So as a rule applicants write in and state, "My expenses will be so much"--an itemized approximation. Liliane De Cock put down a guess of how many miles she'd travel, and so much per diem in the field. Otherwise you could go broke, if you got just what they gave you as a stipend.

Really, it started out as a system for scholars to do work that they couldn't be paid for otherwise. It was often directed to the sabbatical year or to a leave of absence--something like the Ford Foundation project, the institute of [Center for the Study of the] Behavioral Sciences. A university will give their people a year's leave of absence to come and live and work for a time with this group. It isn't exactly a sabbatical. I think they still pay the professors. Then the institute pays the expenses. The theory is that they get a very intensive training and experience in the field and that the parent institution will benefit. A professor comes back with vastly expanded knowledge in his field. I would say it's all very flexible.

Teiser: You dealt with Henry A. Moe?

Adams: Yes, a wonderful man.

Teiser: He must have been a very influential man, over the years, in the cultural development of the country.

Adams: He really was.

Teiser: What was he like?

Adams: Well, he was--I remember, he was not very large, a little rotund, a very quick, very gracious man, always gave you a very positive impression. I mean he was a past master at saying no to people and making them feel good! And Gordon Ray, now president of the Guggenheim Foundation, was trained by Moe, and he's a very fine person.

Teiser: Has he succeeded Moe?

Adams: Yes, as secretary general of the foundation. It's quite a job! Of course, they have plenty of assistants; but, as I understand it, the applications come in and are all screened by a prime committee that weeds out the phonies from the acceptables. Somebody has to do that. It's perfectly obvious--you read something and find it's out of the question. Then the ones that are selected as possible entries are divided into different groups and go to different committees. Then the recommendation of the committees come back and those recommendations go to the general committee for final passage. Well, sometimes they've had committees in photography that didn't know the difference between subject and statement, you know. It can be very tricky. I think I am correct in describing the procedure.

You never know who the committee is. You might learn later on after several years, but the committees are very quiet. If you're applying for a fellowship you write in your list of sponsors. You've already contacted the sponsors--"Will you sponsor me?"--and if they say, "We'll be glad to," then you give the foundation their names. Then Guggenheim sends the sponsor a copy of your project, and your objective reply is strictly confidential information. The idea is that it must be objective for both the good of the fellowship and the person involved.

Say if you were doing something and had asked me to sponsor you, I would get from them a copy of your project. Then I would write back on a sheet my objective analysis of it. Of course, if I find there was something wrong with it, I'd be morally bound to say it. I've had to do that sometimes. It's painful with people you know well when they want to do something and you know they can't do it. Well, if you gloss that over and say, "I think they're just great," and you know they're not, it's just hurting everything. Well, those papers are then judged; your name is cut off. You have to sign it, and it's passed as authentic, and then before it goes to the committee, the identification is removed, and there's just a note saying these five sponsors were all acceptable to the main committee, authorities in their field. So it's actually quite impersonal, you see, in the end.

Adams: I always claim that in applying the best thing to do is to make a very simple statement, keeping within one page, and then adding an appendix with all the details, which, if the committee is interested in it, supplies the information. But a ten-page-long project description is a very wearying thing for the committee. Enthusiasm can wane pretty quickly when you have some detailed, long-winded discussion.

Brett Weston asked for a fellowship. He said, "I wish to photograph Alaska." Well, all right, but what happens? Book? Portfolio? "I just want to photograph Alaska" isn't enough according to their standards. They would like to find out what you're going to do, not just get a collection of negatives and sit on them. Now if you say, "I want to do a book on Alaska," or you say, "I just wish to do creative work with the hope of a portfolio and exhibits and publication," that's enough.

But the painters and sculptors just do creative work. They may ask for an exploration for work with casts--for example, a certain kind of modern cast stone--or work with welded metals, etc. But I suppose now they would accept something as simple in the other arts as well. You see creative writing and poetry, but very often creative writing of texts, usually directed to some purpose--either a novel or a series of critical essays on covered bridges, etc. There was one photographic project that came through with an essay on covered bridges, and I said as far as I was concerned this wasn't photography, this was architecture. I'd never heard of the man before, but he wanted to go out and make snapshots of covered bridges. That wasn't photography. And I don't know anything about covered bridges, but I know something about photography. So if I'd seen some of his work or knew him, I could talk about him, but--

Teiser: When you applied you didn't say you had one specific project in mind, then--you just wanted to make photographs of the national parks?

Adams: Yes, and I hoped for exhibits and books.

Teiser: You certainly made good use of your work.

Adams: Oh yes, it had good results.

Teiser: The next year--June '47--was the Fortune article which De Voto wrote and was illustrated with your photographs of national parks.

Adams: And also by some painters.

Teiser: And some painters too? I see. Did that start with De Voto's essay?

Adams: No. A very nice lady, who was the picture editor--oh dear, I think she's dead now. She was a charming person, Deborah Calkins--used to live near San Rafael. She would conceive articles of this kind, and she asked me, "Would you be interested in participating in a portfolio on the national parks? We've got Bernie De Voto to write the text." Whether she initiated it, or whether some Fortune committee did it, or whether she sort of spurred the "idea" committee--it's awfully hard to know just where those things originate.

Teiser: But you didn't initiate it--

Adams: No, not directly. I mean, you never know--maybe somebody saw a picture or you talked to somebody, and they passed it on. You never know that. But as I said, I didn't directly initiate it.

Morgan & Lester, Morgan & Morgan

Teiser: In 1940 you did the essay on printing for Graphic Graflex Photography that was published by Morgan & Lester. At least it was published that year.

Adams: Yes.

Teiser: Was that your first publication for Morgan?

Adams: Yes, that was the first one. Then I did some articles for the Zeiss Magazine, which was a little commercial journal, but very well done. Morgan edited the Leica Manual. There's a new copy [edition] of the Leica Manual coming out, and I have an article in there. The trouble is, cameras advance and change so tremendously fast, by the time you write about them or a process you are passé. It's like Polaroid; you get the revision of an article or book pretty well blocked out and along comes a new camera or process!

Teiser: What chapter did you write for the Leica Manual?

Adams: It was on exposure, I think.

Teiser: They've just finally brought out a rangefinder camera with an interior meter.

Adams: Those interior meters are very tricky. The single-lens reflex is the only "safe" thing today. You really see what you're getting. In the old rangefinder ones, the finder's off-center, and as you get working close you don't get things really centered or in correct parallax.

Teiser: What was the rest of Lester's name?

Adams: Henry Lester.

Teiser: He, after separating from Willard D. Morgan, did other things?

Adams: Yes. He was more the technical man, and he was I think relatively insensitive to creativity. He wanted to make things more commercial and tied in with products, and Morgan felt, I think, that they had enough of that. And there were some serious differences between them. The only thing Morgan could do was to buy him out, and that practically wrecked them because Lester's share of interest in the firm was large. It was a lot of money and Morgan needed cash, and so there was a bad financing problem there, and they brought this problem to their authors and asked them to postpone royalties for a few years. But he came out all right in the end. Then he died. So the boys have taken it over now. It's Morgan & Morgan--Doug Morgan and Lloyd Morgan. I think Mama (Barbara Morgan) controls it in a way, but she has no business sense whatever. She's a very fine artist and person, but just doesn't know the business world.

Teiser: They published the Photo-Lab Index, didn't they?

Adams: That was a very important thing. It's still going. That was Morgan & Lester; now it's Morgan & Morgan. It's expanding and very fine. And they have a special editor for that.

Teiser: That seems to be one of the great feats of collecting technical information.

Adams: Well, it's a strange thing. It's like an engineer's handbook. It's got everything in it that you can think of that's already been published. And then it has what they call "time-gamma tables" for different film and different developers, but they're all done on a theoretical basis, which is the only way you could do them in a work of that type. But there are no comparisons; in other words, if you asked, "What is the difference between Rodinal and D76 with this film?" Well, you look at the time-gamma charts and don't find anything there. You see, gamma is the measure of contrast (the steepness of the curve). It shows the shape of the curve with different times of development or different concentrations. But there's many more things than that involved. But if you want to find out a certain film--what the time-gamma chart is--or what D76 at a 1:1 dilution does, there it is, stated in a graph. If it's ten minutes, you may get a gamma of .7, etc.

Kodak doesn't use gamma; they use a more complex and stupid thing called a "contrast index." And they just draw a straight line from the lowest recognizable textural value to the highest

Adams: recognizable textural value in the scale. And it's a straight line, and they measure its angle from base. But it doesn't show the shape of the curve under it. So, for myself, I like to see the shape of the toe and when the shoulder starts to flatten, and so on. But the "c.i." doesn't show these--it's just the straight line between two points.

Teiser: Why'd they do that?

Adams: I don't know. They're not photographers. They thought it meant more than gamma. Well, with gamma, all those values have to be related to a known sequence of values of light. And in a sensitometry machine, you give exposures of geometric increments at times based on \log_{10} progressions, and there's no image; it's just a flash of light. The film is exposed at the same time for different intensities of light. Because the time factor is what controls the real reciprocity effect. And the film doesn't know what it's seeing. But, say if you go over a second, where you have to give a second and a half, two seconds, or more; to get the same density in relation to light and to exposure, you have to give more time. The "failure of the reciprocity effect" varies with different films. And it can be very disconcerting. It can be figured, but the formula for it doesn't mean much or anything to the practical photographer.

Edward Weston used to say, "I don't know why it is; with perfectly beautiful soft evening light, I go out and make a picture, give ample exposure, but it turns out very contrasty, and I can't print the thing. So I have to give four, five, or six times the meter-measured exposure, and give it underdevelopment." He found all that out empirically. He was suffering with the "failure of the reciprocity law," which affected the low values first, and did not affect the high values. So therefore when you expose for the low values, you're overexposing for the high values, and you had to hold those back by reduced development.

If you understood the quantum laws, you probably could understand reciprocity. But so few people understand the quantum laws that all you can do is to try to explain them in general terms. I do not understand the quantum physics. It's really quite beyond me, but I can see how it applies.

Teiser: The first volumes of your Basic Photo Books--

Adams: Basic Photo series, yes.

Teiser: --were published in '48 by Morgan & Lester. The first was Camera and Lens; the second was The Negative. Did you work on them at the same time?

- Adams: Oh, they followed along. Then number three, The Print--
- Teiser: I think you mentioned them before. Did you say they were suggested to you by the publisher?
- Adams: No, I suggested them. I just felt that we should do some books that would support the new approach to teaching. I've revised Camera and Lens, which is in the second printing, and it's pretty good. Now I have to do the same thing with books two and three and the Polaroid [Land Photography] Manual. You see, they go so fast, and by the time the thing is in print and at the press there's something new on the horizon.
- Teiser: Mr. McGraw said that he couldn't understand the Basic books. [Laughs] I think he was exaggerating; I think he meant he couldn't understand some things in them.
- Adams: No, you have to look at him psychologically, and the fact that he could understand them perfectly well. But it's easy to say you don't understand, and he could understand them. But he just worked with a little different idea of photography. He goes out with a camera and a meter and reads it in the most offhand way. He gets an amazing series of adequate exposures. But he's not quite sensitive enough to know the difference between the adequate exposure and the really meaningful exposure, you see. And those are things you can't really explain to people. I'm talking about things that relate to very subtle controls, and he isn't interested in those controls. He has a very factual mind, and he's done some perfectly beautiful things, but he throws those out because he thinks they're too "moody." He wants kind of a nice Norman Rockwell interpretation of nature. And there is a strange thing-- you can make color pictures, and you can get them all to be very adequate, but they just don't contain any magic. Now, that's one of his affectations. He can understand those books perfectly well. [Laughter] But he never reads anything for content, you know. He looks through it for mistakes. He says, "This isn't the right word," or, "You left a comma out here." Or, I'll be talking about something, and he'll come right in the middle of a thought and correct the pronunciation. And I say, "Dick, you know what I mean." I said "advértisement" and he said, "That's wrong. It's 'advertisement'." I said, "I'm sorry, 'advertisement' is correct." He said, "I know my language. That's been my specialty." So he went to the dictionary and found that both ways are perfectly all right, and he was very chastened. [Laughter]

But his mind is very strange; he's always complaining about something. We call him "F.F. McGraw," "Find-fault McGraw," because the poor man is always looking for something wrong. If he gets a record, he can't play it for anything musical if he finds something

Adams: wrong with it. If there's a small defect--you say, "Well, don't you ever listen to the music?" "Of course, but I can't listen to the music if the thing's imperfect." [Laughter] If someone sneezes during a concert, you don't walk out, the concert isn't ruined. But to him a thing like that would be just a great distraction. It would take him quite a few seconds to adjust to it, you see.

Color in Photography

Teiser: He said that when he found out about color photography, that that was what his interest had been searching for all the time. This is an entirely different world, isn't it?

Adams: He did very good black and whites--very sensitive things--and so did Eliot Porter. But then, color photography tends toward the literal. But what is "literal"? You can't go out and compare dye color with nature color. You just simulate color. He will reject most reproduction in books because the reproductions are off-color or the "masking" is off. He's right if you want to talk about perfection, but you just can't get these things perfect. All the Skira art books, for instance, which are really quite magnificent, reveal that the originals are not as brilliant as the reproductions. There's a very good reason for that. You remember, well, say the Birth of Venus, which has a powerful emotional effect; when you see it in the Skira books, it's more intense in color value, but you're not conscious of that. And when the Birth of Venus came to San Francisco, I remember taking down an art book (I think it was Skira) and looking at the reproduction, which was far more brilliant compared to the original. But when you looked at the book alone, that recreated the spirit of the original for you. It's a very complicated thing, in a sense a transcription. They were all there; the colors were amazingly accurate; but it was of just a little higher vigor.

Teiser: Does this go back to, in a sense--does this echo the Stieglitz idea of "equivalents"?

Adams: Oh well, no. If you're reproducing a work of art, you try to get something that gives you the simulation of the total effect. I guess you could say that you're producing an equivalent, although his was different; his was the creative equivalent, the mood--something you had to say about the subject--which wasn't anything like copying a painting.

Teiser: I meant the literalness of color photography in general.

Adams: It would be very difficult to do that. There's two ways of achieving exciting color: one is to set up a studio where you've picked your color and controlled your lighting. You can create fine color compositions and record them because the film is capable of very wonderful results. But in nature, in natural lighting, you have terrible things happen because the eye adjusts for variations and the film can't.

In this room, for instance, observe that white paper. It would seem white out in the sun and it would seem white in the shade and it would seem white under tungsten light, because the eye can adjust for color temperature. That same paper held out in the sun and then carried back in a cave for as long as you could see it, it would be a white paper or green paper or red paper, whatever it was originally. But it might change thousands of times in intensity. But the film doesn't work that way. Color film is sensitized and balanced to a certain degree Kelvin. Kelvin temperature is called degrees K ($^{\circ}\text{K}$), and 273°K is absolute zero Centigrade, and that's around 460° Fahrenheit. Then as you go on up the scale, iron begins to glow at 400°K , producing a reddish color. Now, the sunlight out here now in the evening would probably be 5000°K or less, and ordinary color film would give a reddish, warmish cast to the image. If the light's coming from the blue sky, it would probably be around $12,000^{\circ}\text{K}$, and your foliage in shade would take on a cyan color. When you see a lot of Eliot Porter's pictures in the woods of the Southwest, the leaves in the shade are a cyan green, because they're picking up the blue light from the sky, whereas out in the sunlight they might be a warm yellow-green. You can correct one or the other. If it was too warm a light, you use a bluish correction filter. If it's too cyan a light, you'd use a magenta and blue correction and get a more normal effect. What you think the eye sees is normal, but you can't correct them both together in the film! The miracle is, we're getting light from the sky, and this light in here is really very blue, which a color temperature meter would show.

The theory in Dr. Land's Retinex concept, where the eye and brain "compute" the color, takes care of the variations. That's why with the tungsten light, a piece of paper appears white; you accept it as white. When you divide the tungsten light and daylight--they have an experiment. You use a dividing panel so that one side is receiving only daylight and the other side only tungsten light; then you see the two values separately. When you "cross over" and see both together, the one under daylight looks bluish and the one under tungsten light looks golden. It's a pretty fascinating business.

Adams: But if I take my color camera and take photographs in this room with Polaroid color--the effect would be greenish. And that's because there's a certain amount of blue light coming through those skylights--well, it's extreme violet--that affects the green layer of the film. If I put on an ultra-violet light, then I'll get a more normal color. But you never see such subtleties with your eye.

But the reason I don't like color photography much myself is that you don't have the aesthetic control, the imaginative control--you can't control your color like a painter can his pigments. I think I've repeated it before that the average color print looks to me like a piano sounds when it's out of tune. There's something just very unpleasant about it. Marie Cosindas uses the Polaroid color, which is a very beautiful smooth color--more "pigment" value than otherwise. She's achieved some perfectly beautiful effects. But she does certain things in a rather abstract way, and will use mixtures of tungsten and daylight, will actually arrange and compose in color. A tungsten image is bound to be yellow, because the film is adjusted to daylight. But she uses it creatively that way.

Harroun: I have rarely seen a color picture that I can respond to at all. And I don't know why it is.

Adams: Well, you can see color images to better advantage in printing-press reproductions, because they can control the inks and they're not dyes, they're more like pigments. But the color print is usually a dye image. McGraw has what is called the carbro process, which is more lasting than dye prints. I don't tell him, although I've mentioned it--they're supposed to be very beautiful, but to me they often become very dilute in color. And I don't feel they have any real quality--well, I've seen a few that have. I guess I don't like color prints!

When you transfer that image to the printing press, then you're using inks instead of dyes, so you've got a totally different feeling. Then if you're working with three or four colors, you can adjust your colors. A fine engraver will be able to balance out many colors that go wrong or are offbeat in the original. He can do this by filtering his plate exposures.

Reproductions of Eliot Porter's prints are mostly much better than his actual prints.

Harroun: I still don't like to look at even a book of color--

Adams: They're usually garish.

Harroun: Yes.

Teiser: I don't know why, but people's color slides, amateur color slides, are more acceptable. They're almost like a folk art--like a letter from somebody, a personal letter.

Adams: Well, you have something different there. With a color slide, you are seeing light. The light is going through the dyes and becomes colored light and is reflected from the white screen as colored light. And it has a very great range of brightness, much greater than any ordinary print. A color print cannot show such range. Well, I suppose if you include the black, you can go up to one-to-eighty or one-to-ninety reflection density; one-to-sixty-four is usually the print color range. But a transparency can easily be one to a thousand and more. And then you project this on the wall, you're getting back a brilliant light composition, much more valid and much more rational than in the print. All the values are revealed. But you make a color print, the images overlap, so you have to have the dyes very intense so that they don't become submerged. In press printing a color plate, the dots are "rotated." You look through a magnifying glass at a color reproduction, you'll see it's a kind of a mosaic of the colors. One doesn't overlap and hide the other. The angle of the screen is very carefully worked out. It's quite a complex technique.

I think Look magazine had the finest color reproductions of any magazine. They were really beautiful. They were smooth and they were full of light. That was color gravure, which had a very fine screen. But just look at these things through a high-power magnifying glass some time--a twelve-power glass, not a microscope--and observe the grain structure. You'll see that in a good plate every color is separate.

Teiser: When you project black and white positives, do you have also there an increase in range?

Adams: Yes, but the trouble is with that, it's awfully hard to get reversal film to give a proper scale. Using Kodachrome film, the images are too contrasty, because the average print now runs up to one-to-eighty or one-to-ninety and the film can only take a one-to-twenty-five range. So some of the best reproductions have been from moderate-contrast prints on Kodachrome A. And black and whites on that are sometimes quite beautiful. But the values will tend to favor the whites or the blacks. The blacks block up and/or the whites block up if the range is too great.

Teiser: Isn't there a Polaroid Land black and white transparency material?

Adams: Yes, a wonderful material, and some of the sharpest made. You can control the contrast, which is really fantastic. When you process it, you have to give at least two minutes to get the physical

Adams: transfer of the layer over to the receiving film. But you can open the back at any time, expose the image to light, and stop the silver transfer. So you can control the contrast in the most amazing fashion and get beautiful slides. They sometimes have "pinholes." For some reason they got off to the wrong start because they didn't have high contrast slide material ready as well.

Thirty-five millimeter slides are excellent. They can be made with Polaroid transparency material, of course.

Teiser: It's used a good deal in science, isn't it, and industry?

Adams: All the time, in everything related to visual education; it has become the standard. I have 3 by 4-inch slides that are done on Polaroid, and they're really very beautiful. You can control the light volume and color value with a Variac. There's a possibility of a new color slide coming, which will be a great step ahead.

[End Tape 17, Side 2]

[Begin Tape 18, Side 1]

Portfolios and Publishing, 1948-1952

Teiser: In '48 you completed Portfolio One. You hadn't done a portfolio since the Parmelian Prints, had you?

Adams: No.

Teiser: Portfolio One was in memory of Alfred Stieglitz. What was the origin of it--do you recall?

Adams: Well, I guess I just thought I'd like to try a portfolio. I really can't think of any other reason. I think we were looking over the early Parmelian Prints one time, and I thought it might be nice to do a real portfolio, and it would be natural to dedicate it to Stieglitz, and I went ahead and did it.

Teiser: There were twelve prints. Are they varied?

Adams: Varied, yes. All kinds of things. No portraits, but I had Yosemite, and I had Hornitos and Refugio Beach, and Trailside, Alaska; a variety of images.

Teiser: How in the world could you select twelve--from all your work since 1927?

- Adams: Well, it was rather hard. I think I selected them a little bit on Stieglitz's reaction to them. Each one meant something in an intangible way, which I didn't want to verbalize about.
- Teiser: How many copies did you make, do you remember?
- Adams: Was it seventy-five? It wasn't very ambitious.
- Teiser: When you do a thing like that, do you devote a month or so to it?
- Adams: Well, once you've made the selection and you know what you can do, then of course, when you start printing you have to make your first fine print; you have to completely document it so that you can go on the next day and duplicate it. Sometimes it takes three days until you're satisfied with a print, and then you can make the whole set in a day. That means many would be printed one day and toned and washed the next day. Maybe it takes more than a day to make a set of prints. After they are dry they have to be carefully segregated. We always make more than the final number because we know we're going to have losses. Then the print is very carefully trimmed after the dry mounting tissue is attached, mounted and stamped on the back, and then I sign them on the front, put the title on the back, and then collate them. It's quite a job!
- Teiser: Did you choose the type for the printed matter, for that, or did the Grabhorns?
- Adams: Well, I guess I asked the Grabhorns to do it, and they submitted a proof and I liked it.
- Teiser: And they had the cases made?
- Adams: No, a man named Perry Davis made the cases. The Parasol Press cases were made in New York, and they are quite handsome, a strong case with linen cover. It was not a cheap case!
- Teiser: And you did another portfolio in 1950?
- Adams: Then Portfolio Two, which relates to the national parks and monuments.
- Teiser: Did you choose the best of your work on the subject--?
- Adams: Yes, things that we all felt were most potent.
- Teiser: Did you make that choice yourself?
- Adams: Well, I made the final decisions, but I usually show a lot of prints to friends and colleagues and get their opinions. People's opinions are valid as long as they don't go against your own basic judgment.

Teiser: What percentage of your negatives have you ever printed, do you think?

Adams: I suppose about 25 percent.

Teiser: Do you make proofs of the others?

Adams: Very few.

Teiser: You don't make proofs ordinarily?

Adams: No; I should. That's one of the projects I plan to work on. Of course, I have to divide the negatives into categories of purely record and historical subjects, some of which will go to the National Park Service; and then historical of other than national park subjects will go to The Bancroft; and then some pictures of Yosemite, which can be used and, if possible, printed, which will be very good for the gallery in Yosemite. Then the purely creative work is going to the Center for Creative Photography of the University of Arizona, Tucson.

Teiser: Do you have plans to proof everything?

Adams: I don't know how I'm going to do it--but someday somebody will.

Teiser: Can't you have an assistant make proofs?

Adams: Oh yes, but I haven't got two darkrooms. And good proofs of course are creative work.

Teiser: You can tell as much from a negative, or more, than from a proof, can't you?

Adams: Yes--more than from a bad proof! I've proofed Joseph N. LeConte's negatives, and made up album after album of the LeConte negatives for the Sierra Club. That should be done with my early pictures of Yosemite. Make up a big collection of prints of these negatives. They were done in the twenties; it's fifty years and more ago, and there are lots of changes, and students of the park would like to see what the park looked like. I hope they're going to try to restore the park to the way it appeared in the past, but what decade? You see, when the white man came in 1853 and when the first "civilization" came before the turn of the century, there were definite qualities of the landscape which have changed greatly over the years.

Teiser: What was before the Indian--?

Adams: Well, the Indian was there a very long time. I do not think we know how long. They have evidence of very severe fires in the past.

Adams: But when the Indians actually started burning off the brush, of course, and lightning fires were not under control, the forest was stabilized. We had our beautiful big open groves that Muir speaks about. But they're no longer so open, because the fires have been controlled. Now the young trees and shrubs have grown up and they've become a menace in terms of fuel, which if ignited would burn vast forests. You might have complete devastation of the great forests. Whereas in the earlier days there would be only a few scorplings. You can see the big scars of fires on the sequoias. The fire came through just so often, mostly caused by lightning. But now we put all fires out, and when we do that it looks fine for a while, but it drastically changes the whole character.

This bug infestation in Tuolumne Meadows, I've seen three of them. That's what kept the Tuolumne Meadows forest as it was for so many years. I remember the great numbers of dead trees, with young trees coming up among them. Then they started spraying them and created a severe change of character. It destroyed a tremendous number of beneficial insects, as well as bad ones; the fish left, the flowers didn't bloom--

Teiser: Just upset the whole--

Adams: Upset the balance of nature. I was fighting to prevent them from spraying the Sierra Club property. But then it was shown that they couldn't spray any of the area at all if we had held out (and I said we should have held out). Now it's admitted we should have stuck by our guns because spraying made some drastic changes, and it will probably require a long time to recover. It's not apparent to the average person, but I'm sure the ecologists are deeply concerned.

Teiser: When did they spray?

Adams: Oh, I think about ten years ago. The bug (the pine beetle) has a very interesting cycle. It goes through another plant. When the CCC [Civilian Conservation Corps] boys were there, they went over every square foot of the whole area to cut out this particular plant (I forget just what it was) which was the secondary host. And that probably did more than anything to keep the larva stage quiescent--it's a very complicated cycle. In fact, it's so complicated you wonder how it ever came about. It's like the famous tapeworm cycle, which is just incredible. How does nature know how to do all that? [Laughs]

Teiser: Your next book that I have here was in '48, Muir's Yosemite and the High Sierra, published by Houghton Mifflin.

- Adams: Yes, that was selections by Charlotte Mauk of Muir's writings, and then my pictures--terrible reproductions.
- Teiser: How did that collaboration with Charlotte Mauk happen to come about?
- Adams: Charlotte Mauk was the editorial writer at the Lawrence Radiation Lab and a director of the Sierra Club, and an old, old friend, and it just worked out as being a natural development. She did a fine job.
- Teiser: Did you start with the selections, or did you start with pictures?
- Adams: Well, she did the selection of the text and I did the pictures, and she and I selected the short lines that went with the pictures. But I left the text entirely to her. Obviously she was doing a swell job and right in sympathy with what I had in mind, so--
- Teiser: And in '49 came My Camera in Yosemite Valley, which was copublished by Virginia Adams and Houghton Mifflin. How did that arrangement come about?
- Adams: Well, I thought we could do these books, the My Camera series, and we got thinking, "We are not actual publishers." We would be limited to purchasers in Yosemite Valley and close friends in San Francisco, and a few dealers. Houghton Mifflin could take national distribution. So we reserved certain areas and they took the rest, and we divided up the books. They took five thousand copies at \$2 apiece, and that practically paid for the production. Then we were paid royalties on top of that, and then we sold the rest of them and made some money.
- Then we did My Camera in the National Parks on the same basis. Then My Camera at Point Lobos by Edward Weston, and Virginia lost everything she'd made on the other two books. [Laughs] Although it was a beautiful book and is now very valuable! The first printing is almost unobtainable, and yet it was remaindered.
- Teiser: That was copublished by Houghton Mifflin also?
- Adams: Yes.
- Teiser: Then you finally got around to the third book of the Basic Photo series, The Print, published in 1950. Incidentally, had you plotted this out when you started that series?
- Adams: Yes, it was pretty well thought out. The Negative, The Print, then photography in natural light [Natural-Light Photography], then artificial light [Artificial-Light Photography]. Book Six was

Adams: supposed to be a book that would answer a lot of photographic problems--twelve photograpic problems--and then I got to worrying about that. There's a million photographic problems, so solving one problem in detail really wouldn't be significant. So then I did the Polaroid Manual, which is now known as Book Six of the series.

Teiser: Then The Land of Little Rain we discussed earlier. That was 1950.

Adams: Yes, and I had the plates for that made at Walter Mann's, and proofed. That was a much better job than the Muir book; it was on better paper, and superior engravings.

Teiser: Had you very closely controlled the Crocker reproductions in the Yosemite books?

Adams: Oh yes, they were very good that way. They allowed me to work with them, and we controlled the engravings by the Walter [J.] Mann Company. Peterson, who was a superb technician, did a wonderful job. It was done in letterpress, which is obsolete now; they don't use letterpress except for type. Everything now is offset or double offset. Even gravure isn't very good compared to the fine offset techniques. With the Yosemite book and the other books, we had to print the title in rubber type on the other side of the picture page, so there'd be no "printing through," the impact. In the little catalogue for the 1963 show, you'll see where the plates "printed through." You'll get a strong picture but there will be an impression of the plate on the other side.

Teiser: Did Lawton Kennedy print that?

Adams: No, that was H.S. Crocker Company. The last book they printed was very badly done; it was printed very fast in the press. And when you print fast, you have to thin the ink, and then the ink puddles.

Teiser: Natural-Light Photography came next, then, in the Basic Photo series.

Adams: I've got to revise them--all of them--to keep up to date.

Aperture Edited by Minor White

Teiser: Then the next thing to discuss is Aperture, which was started in 1952.

Adams: That's a great magazine. Minor White really started an important concept. I thought it was a wonderful thing to do and helped raise some money for this magazine. I proposed the title and it was accepted. Some people thought it would be not liked, but it seemed to have carried off well.

All kinds of funny magazines started after that. Some of them started with good intentions and then would "blow up." People don't realize what publications cost. We got some good subscriptions for Aperture, and I got back-page advertisements from Polaroid. Then it took a very definite direction, a quasi-mystical direction--one that I really wasn't interested in but felt obligated to support. You can't demand, "I want my thing," but they had some very fine photographers represented, and I went along. Some of the issues have been extremely "far out" and some have been extremely rich and varied. It's probably one of the most valuable contributions to the record of creative photography there is. And, of course, there's all kinds of second- and third-rate publications now-- little things by different colleges, portfolios, etc. You just can't possibly keep up with them, and many are not worth keeping up with. Some, however, are remarkable.

Now the Friends of Photography are going to do the Untitled journal, and that probably will be very important. I don't think they're going to stress fine reproduction, because so much of contemporary work doesn't relate to fine reproduction quality; it's just the image. Of course in many cases the images don't deserve it, but after all, the photographic image is quite a beautiful thing, and it would be like performing on a lousy piano, you know, to print something good in an inferior way. If it's bad enough done, then you know it's just a record. But when it's just in between and doesn't convey the quality and yet presumes to be good photography, it is sad!

Teiser: There was a magazine published a year or so ago in San Francisco, reproduced by the least expensive lithography, most contrasty; it looked to me as if the photographs had been taken with just this reproduction in mind. Has there been a trend of photographers working toward this very contrasty, harsh reproduction?

Adams: It could have been. Well, there are some very contrasty, harsh techniques, but I think that most of them just don't give a darn, and they get them reproduced, and there's no differentiation between one that is consciously made contrasty and one that just happens to reproduce that way. Infinity magazine is another one. Sometimes they're just dreadful, and other times they're very exciting.

Teiser: Did you think that the reproduction of your photograph of Half Dome* on the cover of the last but one issue of Infinity--

*"Moon and Half Dome," May, 1972.

- Adams: That wasn't so bad, wasn't so good! It wasn't so bad because they didn't presume anything. The Wolverine people used it. The reproduction in Life was simply terrible--a big full-page advertisement; that was much worse. They had all those prints made for the catalogue, and then for advertising, and then special copy negatives made, and all scaled to the requirements, but that doesn't mean they're printed to the requirements. You do what you can, then hope!
- Teiser: I sent Wolverine a dollar for a big reproduction of one ad. They had made a horizontal into a vertical in the ad, but the reproduction that came is the full print.
- Adams: Oh, they've had thousands and thousands of applications for that. The advertising man has now been elevated to vice-president in charge of sales. He's still in "advertising." But it's been a very great success.
- Teiser: Well, I should think so. I don't know where else you can get that much good photography for a dollar.
- Adams: Well, it isn't good reproduction, but at least it doesn't presume anything.
- Teiser: Back to Aperture--the founders, which I presume were the people that put up some money for it--were you and Dorothea Lange, Minor White, Nancy Newhall, Barbara Morgan--
- Adams: A good man in the East put up more money than we could. None of us, up to that time, could put up much money. We all gave a little--\$25 or so.
- Teiser: Ernest Louie--
- Adams: I don't know him at all.
- Teiser: He was the designer of the magazine. Melton Ferris?
- Adams: Yes, he's a San Francisco designer and head of the Northern California chapter of the A.I.A. [American Institute of Architects].
- Teiser: And Dody Warren.
- Adams: Dody Warren was Edward's assistant, and then married Brett. Now she's married to a writer in Hollywood--Thompson. She's a great person.
- Teiser: At one time was it she who simply signed articles "Dody"--without a last name?

Adams: Yes, that was the name she used.

Teiser: Was she at one time also assistant to you?

Adams: No. She helped with the books. She was a very sensitive photographer. Everything went well until she married Brett, then Brett insisted she photograph like he does, so that didn't last too long. Too bad, because it could have been very good.

But Aperture had some angels, like Shirley Burden. Shirley Burden comes from an exceedingly wealthy family. I think it's Standard Oil. But he's a photographer that went into color photography because he felt he had to do something. Doesn't have to do anything. And he's been very generous to photography and photographers. He has helped out the Friends of Photography in their new venture here to a commendable extent. He's not too different from Dick McGraw. He doesn't really have to do anything, so he's always procrastinating. That's one of these things about so many well-to-do people; it takes a certain kind of well-to-do people to overcome that. Now, David McAlpin is a tremendously wealthy man but has always leaned over backwards to keep active and do things and contribute. In fact, the whole Rockefeller clan are trained to do that. The Stern-Haas family in San Francisco are the same.

Then there's that in-between group who I guess are dilettantes in a sense, because they never achieve enough to really be called a creative amateur. But they have more money than they need. Dr. Land says about these people, "They never want to meet the challenge." Or if the challenge asserts itself, then they sidestep because they don't have to do anything. But people like Eliot Porter, who is very well off, and Strand—they all met the challenge and won!

But there are so many people in this world who have so much means and are well trained; they could do anything they wanted to do, but never quite achieve it. It's a very interesting psychological situation.

Teiser: And in contrast is a man like Gilpin, who apparently must work a long day--

Adams: Henry Gilpin. Oh yes, he's a hard-working deputy sheriff, and yet he does very fine work in photography. The only thing I'm worried about is that those people--the same with Richard Garrod, who's the city planner of Monterey--is that they get the idea that they might give up their work and make a living out of photography. And their kind of photography you don't make a living at! But they can get much more satisfaction out of it than they would if they had to be professional photographers.

Adams: But then again, you go out and you do the photographs you want to do and you acquire a beautiful collection, and then somebody comes along and says, "I want something like that done of my area, or my business, or my family." You go and try to do it and it doesn't work that way, because the stimulations do not come from within. Like Cartier-Bresson's first book, The Decisive Moment, was just wonderful--twenty years work. Then he did a book on Russia and one on China, and they don't come up to the first book in quality.

And of course I've had the same things occur in my work. I've done a book on Mission San Xavier in Tucson, Arizona,* with Nancy Newhall, and it's good enough, but it's not like a portfolio of fine prints.

Teiser: I like it.

Adams: Well, but it's still not really good. It's no criticism of a photographer, it's just an "adjustment" to publishing reality.

Teiser: Well, does any creative person work evenly ever?

Adams: No, very few. Robinson Jeffers said, "I just can't write occasional poetry. If there's anything I've got that you can use, why, that's fine."

[End Tape 18, Side 1]

[Begin Tape 18, Side 2]

[Interview XV -- 7 July 1972]

Adams: Did we actually get the foundation of Aperture? Several of us were hoping that there would be a publication of creative photography. Minor White had apparently interested some people in it and was looking for a title, and several titles were suggested, all of them quite corny--"New Camera Work," etc. I thought the aperture of the lens is really what you see through, so I suggested Aperture and they took it. No matter what you say it has connotations, but it seems to have been a very good title and has lasted all these years. So I'm very happy about it. I think I'm on the board of directors or something; I don't have very much to do directly with it. It has gone into very esoteric and rather complex directions, more or less exploring fresh work, but at the same time, they will bring in some older people of renown.

Teiser: They've done some whole issues devoted to single photographers; have you approved of that?

Adams: Yes, I think so. I think it's all right, although some people have been left out that didn't quite follow the dogma.

*Mission San Xavier del Bac.

Teiser: Like who?

Adams: [Laughs] Me, and a few others. Well, I'm sort of an establishment character, and I'm perfectly happy. But there are people, pretty much in my style of work and my approach, who have not been accepted because they're not considered either esoteric or mystical enough or experimental enough, and they haven't been dead long enough [laughter] for somebody to unravel their aesthetic meanings.

Teiser: Maybe one point is that the sort of thing you've done, you've done so well that it's a difficult act to follow.

Adams: I think probably I'm very well known, and there isn't any need to imitate. I think that's one of the theories back of it, which I may agree with. I'm probably among the most well known creative photographers, certainly, just from the amount of work I have done. I don't have any feeling about it really; I don't want to sound as though I am concerned. I am interested that many photographers who are not in that extra-dimensional, contemporary "mystical fold" are not considered. And of course that's all right too, maybe!

Teiser: Does Minor White have the whole control of the editorial policy?

Adams: Well, it's what he represents; he's really a kind of guru and has tremendous influence. He's a remarkable teacher. He's an influential teacher; the student becomes a disciple. There I think we have a basic antagonism, on that point of view, because I've tried terribly hard to avoid that in my own work. He's trained people who photograph like him, and they in turn train other people who photograph like him--developing a kind of cult in the true sense of the word. Some have graduated and gone on to quite individual functions. But it's a peculiar thing--the power of the individual in teaching. It can take hold of a person, especially in photography. Part of Minor's philosophy was that photography is therapy. An interesting observation: he almost invariably has inferior surrounding people who he is controlling or experimenting upon, with good intent--I don't want to be misquoted in that--fundamentally good intent. But the point is, you have a personality, the inner spirit à la Zen or Gurdjieff; quite a variety of mystical derivations. Photography, then, becomes therapeutic and implies you're sick, and the danger is that if someone's really sick and you're not a trained psychiatrist you can do a hell of a lot of harm, if I may use the term. It's been known to have happened; people just go off the deep end. If you really need therapy you should go to a psychiatrist.

Adams: It would be a form of malpractice for me to take somebody who's psychologically distraught and try, through photography or any other means, to heal them. I believe that's very dangerous. I wonder what is the sum total of the Esalen experiences, down here in the Big Sur. Because sometimes there are people that really aren't qualified doing important things to other people, and that bothers me.

Well, Aperture is continuing. They're taking little advertisements of the photographic trade now. I think they're doing fine; more power to them. Mike Hoffman is publishing it.

Teiser: Who is he?

Adams: He's a dedicated person and making a great contribution.

Teiser: It's interesting, and I suppose it was only by chance, that it went from west to east. It's one of the few magazines, I suppose, of any kind that started in the West and been published successfully for a period, then gone east.

Adams: It went east because Minor went east. There's all kinds of little magazines that start, and people don't realize what it means to publish a magazine--financially and otherwise--and most of them collapse.

Teiser: When Aperture went east, did it change character at all?

Adams: No. It always had fine reproductions--

Teiser: I mean, it didn't change editorial character or--

Adams: Not to any extent. It's been very consistent.

Teiser: When did you first know Minor White?

Adams: Minor White came back from the war, came to San Francisco, and attended one term at the California School of Fine Arts. He was pretty well shot up--I mean psychologically--I think he was sick. He'd had some fever; he wasn't well at all. But he became very interested--of course, he had done excellent work in the Pacific Northwest. I've known of him for a long time, but I don't think I'd met him before. He was so interested that he assisted admirably in the teaching. Then the next year, I said, "Here, if you want to take it over, it's yours." Because I had work to do, and it seemed to be right for him. He'd rented our old house in San Francisco, and we lived in our new house next door. It was a nice arrangement. I'm very fond of Minor; he's really a remarkable person. I get mad at him, in a genteel way, and he gets mad at me ditto, but it's kind of an affectionate madness.

Teiser: He had been a photographer before the war, then.

Adams: Oh yes, and he'd worked with the P.W.A. [Public Works Administration] at the time of the Depression. He was a very fine photographer.

Beaumont and Nancy Newhall

Teiser: We thought perhaps now we might go on to pick up the stream of your work with Mrs. Newhall. Someone said that in the books in which you collaborated the sum of your pictures and her text was greater than one plus one.

Adams: That's an interesting point. I use the word "synesthesia," and Beaumont says it should be "synergistic." But the word-- "synesthetic" might be a better word. "Synesthetic" means for me that there are two aesthetic-emotional qualities coming together. Well, the word as I use it means that the pictures do not illustrate the text and the text does not describe the picture, but they are two separate creative entities which have almost a symbiotic relationship. In other words, they produce a third entity of expression. And it's a very important thing. Some people have worked along those lines--Nancy worked with Paul Strand in Time in New England, and Wright Morris has attempted it as a single personal expression. But of course it can also become highly esoteric and vague. I mean if you have things together that do not "communicate," then you have a very peculiar combination of "happenings," which is sometimes very hard to understand.

Minor White, I think, has a tendency to combine pictures and words in a way which has great meaning to him, and probably to his coterie, but it's terribly hard for other people to understand such poetic license in the use of words. It's something which has to be handled very, very delicately.

Getting back to Nancy and her approach, she was a fine painter, and I think I told you she majored in Chaucer at Smith College. She writes what contemporaries call "very flamboyantly," and some people go nuts about it; but some don't like that kind of writing. So many people are afraid of emotions. It's always been an interesting thing to me that if a thing has a slightest bit of emotion in it, they're afraid of it; it has to be very aloof. A lot of people think The American Earth is a great poem; they quote it everywhere--and a lot of people think it's just terrible and unbelievably bad writing. And of course I don't think so at all; I think it's quite magical, and I think that she sometimes does

Adams: carry a pace that is hard to follow. But it has style, and she can make the most mundane statement come to life. But many professional writers, not being able to do that, are jealous, which is interesting. I've seen it happen many times.

Teiser: Some weeks ago, you left us cliff-hanging with the story of Beaumont Newhall. He had just got fired, or replaced at the Museum of Modern Art by Steichen. What happened next?

Adams: Well, I don't know whether Steichen or Maloney or who had a little conscience. But it seems that George Eastman House had been given by Eastman's will to the University of Rochester as a home for the president, and the president just simply couldn't take it, living in such a huge mansion, so it reverted to the estate and Eastman Kodak Company took it over and developed it as a museum to George Eastman. Well, that was the plan. It was called George Eastman House, and I think they gave a big sum of money, which they have supplemented quite a number of times since then; enough to make it a tax-free foundation. They put a General Sobert in as director, and then they had to have a curator, and Beaumont was offered this job and needed it. He went to Rochester and investigated the matter, and while he wasn't happy with many of the things he saw, he figured he might be able to do something with it, so he took the job.

And I remember--I think it was the day Truman came to New York, and I was staying in Beekman Place with the Marshalls. I had Nancy's car, and I was taking it over to their East Fifty-sixth Street apartment. I was supposed to come early in the morning and finish packing--almost everything had gone up to Rochester by truck except what amounted to a little more than a car full, including the cat. And here was a parade on Fifth Avenue, and I was two hours late. In the meantime stuff was piling up on the sidewalk. We found a man who wanted a job, and he helped us pack, fitting things in the car like a Chinese puzzle, and the last thing to go in was the cat in its basket under the dome light.

So we started out in the afternoon. That was before the throughway was built. And as soon as we got up the Hudson Valley a little way, a terrible fog settled in. So we kept calling Beaumont saying, "We don't know what time we'll be there." Finally we passed Albany, and I think we got to Rochester at about 3:30 a.m. The only place he could get was a small apartment in the Normandy Inn. It was the most frightening, dull, overstuffed place I've ever seen. And of course, no pets. The cat knew that, so it immediately chewed up the davenport. [Laughter] Total wreck. They found a room for me in the basement, and I went to a motel the next day.

Adams: Then Beaumont had a quite difficult time, because he found out that Kodak wasn't the least bit interested in creative photography, which had always been the truth. They're interested primarily in business and perhaps historic material. So this museum was not going to have any pictures except of George Eastman or by George Eastman or George Eastman's toothbrush and elephant tusks and big-game stuff. Well! And an endless amount of early movie equipment. Sobert was interested in the movies, strangely enough, and Mary Pickford and others were helping to get a collection together. Beaumont used extraordinary tact, really extraordinary--put on a few shows of early work and finally he had a contemporary, and Sobert thought that was pretty good. People came to see the exhibits.

But Sobert was the kind of a man who'd sit at a desk and say, "Mr. Adams, the only way to avoid war is to prevent it." I'd say, "Yes, General, I can understand that exactly." Well, he made things tough, in a way, for Beaumont, but Beaumont persevered. People became very fond of him in Rochester, and he developed the House into a real museum of photography. Sobert remained skeptical, but Kodak backed Beaumont up. It's interesting! They asked him for a report, which he wrote. Sobert approved of it; he thought it was fine! Sobert had a heart attack and left this military and organizational world. Beaumont was appointed director and then made the House into the finest museum of photography in the world.

The man who succeeded him, for sound legal reasons, had the name changed to "An International Museum of Photography at George Eastman House." Well, of course, it was always an international museum of photography.

The museum world is not for me. There's just too many people in it not having enough to do.

Teiser: Traditionally everybody in any museum is at everybody else's throat.

Adams: Yes, it's unbelievable!

I think of a man like Mitch Wilder at the Amon Carter Museum--people seem to be very fond of him. They were very fond of Grace Morley in San Francisco. But the Museum of Modern Art is just "yeow," like a cat kennel. And I don't think the Metropolitan is much better; but of course that's a city museum and it has a tremendous staff.

But, you see, a museum is often a machine for paperwork. There are certain things that have to be done. There has to be a registrar and a curator--there's got to be things taken care of and acknowledged and receipted, and so on down the line. It usually has a library where everything has to be double cross-referenced and related to the collection. The assistant curator really watches the physical condition, keeps the ants out of the print boxes and so on.

Adams: I don't know whether it's different from anything else, though. The government, of course, has that, but until you get very high up that's pretty much under civil service and "tenure." The superintendent we have in Yosemite now is the best we ever had. He still has four points in the rating less than he needs, theoretically, to be a superintendent. But for some special reason, thank God, they put this over. They had been taking the people with the highest rating and moving them in for retirement: "Just take your last years of your government life here in Yosemite as an honor for what you've done." Well, most are old fogies; they're not up with the times.

Well, anyway, Beaumont has since left Eastman House--retired. He wants to do writing, lecturing, and teaching, and he retired a few years earlier than he had to, but he felt he'd done his job. He was offered a very fine position at the University of New Mexico, and he's apparently getting along fine and much beloved by faculty and students alike. He's the top man in his field.

Now, for this monograph [Ansel Adams] that I'm doing--Minor White, not Nancy, is writing the foreword. The consensus of many people, and I agreed, was that the Newhalls shouldn't be my only spokesmen. They said so too, and I agreed. It just gets to the point where we're a "combine," and then it loses critical value.

Teiser: She's written very definitively--

Adams: Well, while she's given me more praise than deserved, she's always been accurate. She has a wonderful degree of scholarship. Several people wrote in on the Teton book* and pointed out "glaring" errors. And she could answer them right back, chapter and verse, about where to go and look in a certain book on page such-and-such and find the authority for her statement. Nothing was written but what was doubly and triply researched.

Traveling Exhibits

Teiser: You had in 1952 a one-man exhibit at George Eastman House. Do you remember that?

Adams: I don't remember very much about it. I think it was from the collection they had of my work.

Teiser: I see--not got up by you.

Adams: I just don't remember.

*The Tetons and the Yellowstone.

Teiser: Then there was an exhibit circulated by the Smithsonian Institution later. How does it happen that the Smithsonian Institution has circulated a number of photographic exhibits?

Adams: They're part of the National Gallery of Art, and for years they've been trying to get into the photographic field. And they've got a man named Eugene Ostroff, who is extremely capable--a very nice, quiet person. He's more in the scientific-technical fields, which is probably a very good thing because he does take advice on aesthetics from outside.

They have quite a collection. We were down there one time, and this collection was on the top floor, with the sun coming through skylights and falling on ordinary glass cases, and in them were priceless things--Fox Talbot prints, for example. These were under the sunlight with no protection at all, and I blew my top. I said, "Beaumont, why don't you say something?" Beaumont said, "You don't realize that the curator is the director of photography here. I couldn't do that. It would be like one admiral telling off another one." So I wrote a hot letter. Then Ostroff came on the scene, and he nearly died with fright and put minus-blue filters over all the cases. Now I don't know; I think the prints have been properly protected.

Teiser: Well, they seem to have circulated several of your exhibits.

Adams: I think I had a show at the Smithsonian and then they circulated it.

Nancy Kefauver's fine project of Art in the Embassies Program-- I had a photographic show going around with that. Well, it wasn't a show--prints were sent at random all over, and they came back the other day in a big case. And I thought, "Well, I can just guess what's there!" Every one was framed; every one was thoroughly taped; every one was in 100 percent fine condition. I've never seen such magnificent protection, and after all these years! It's been to Nigeria and Tunis and Turkey and Norway--I mean really moved around to the embassies. And they came back in such fabulous condition!

Teiser: Who chose the prints?

Adams: Nancy Kefauver.

Teiser: She chose them herself from among your prints?

Adams: Yes.

Teiser: How big a show was it?

- Adams: Oh, I think there were twenty-five prints of mine. They mixed all the art media; they had woodcuts, etchings, paintings, and sculpture. I think it was one of the great projects, and I've often thought I would suggest a revival of it. Of course, she was a remarkable woman. (I think he was too, Estes Kefauver.) You know, some people have a spark; they constantly think up great schemes. It's automatic; it just comes to mind and heart, and they do it. She was one of those people you never had the slightest trouble with. Everything was perfectly clear; everything was carefully listed. You understood exactly where you stood, and there was a clause in case of some disaster; the government's responsibility was clear. It was noted that these works would be available for purchase from the artist.
- Teiser: Back to Mrs. Newhall again--when did you start working with her? I know you worked with her when she was at the Museum of Modern Art, standing in for her husband--
- Adams: Yes, I helped there, because I was on the photography committee.
- Teiser: When did you start working on publications and on exhibits with her?
- Adams: It was around that time. I am very poor remembering dates!
- Teiser: The first thing that I noticed was a series of articles (I don't know if it was a real series) in Arizona Highways that begin in 1952, in which she wrote the text and your photographs were used. That's the earliest association of your work that I've seen.
- Adams: Yes. She wrote the definitive text on "Canyon de Chelly" [Arizona Highways, June 1952] (but never saw it). Everybody said, "My gosh, this is perfect. She's got everything right!" Then she did "Mission San Xavier del Bac" [Arizona Highways, April 1954] and then, of course, the exhibit, "This is the American Earth."
- Teiser: Before you get to that, let me ask about some others in between: the book for the University of Rochester says it was done with the help of Beaumont Newhall, not Nancy--
- Adams: Yes, Creative Change--that was the name they used. The Newhalls went to Europe, and I lived in their house for six weeks while making the pictures. It was a "take out" of the university--and quite successful. Succeeded in raising the money, anyway, that they wanted. Beaumont planned and coordinated it. I was paid a pretty good fee for the project--I was surprised.

"This is the American Earth"

Teiser: You were about to talk about the "This is the American Earth" exhibit. How long did you work on that?

Adams: We did it fairly fast. It was supposed to take two weeks, and it took nearly two months! And then there were dupes made for U.S.A. circulation, and the government wanted more copies for overseas circulation.

Teiser: Whose idea was it? It was apparently a landmark exhibit.

Adams: This is rather important. [Interruption]

Well, the LeConte Lodge had become moribund; the museum had nothing but a crummy library and a few dried plants under isinglass. The government said, "We see no reason for this" (which was quite true); "we'd like it for a geological museum." I said I felt that the Sierra Club and their conservation principle should be represented to the public. The lodge was something they'd built for the benefit of the public, so why don't we do an exhibit for it which will represent the Sierra Club point of view, and then make the Lodge a living thing?

That was approved. Those were the days when a thousand dollars expense to the Sierra Club was really catastrophic. But we finally got approved for the exhibit, and it was quite a success and quite a handsome exhibit, and the duplicates were shown extensively. Then in the winter this one was sent around to different colleges, etc., in the country. Then our thought was, "Well, why not do a book on it?"

Teiser: What was the inception of the idea?

Adams: The inception of the idea that this should be an exhibit was I guess mine. The development of the idea as a composition was Nancy's. I asked her, "Wouldn't you like to do something that would incorporate photography and conservation? With all the resources we have we could really do something." So she fell for it like a ton of bricks, as we say, and did a very beautiful job.

Teiser: Nothing had ever been done with quite this focus this way before, had it?

Adams: Never that we knew of, no. Not even approaching it. That is, trying to relate conservation to world concepts. The Sierra Club, up to that time, was scenery conscious and interested in taking hikes and outings and preserving the Sierra Nevada pretty much for personal enjoyment, although, of course, the prime idea was "to preserve,

Adams: explore, and render accessible the Sierra Nevada." Well, as soon as a real awareness developed, we had to change that. So this "render accessible" was deleted. But up until that time we had little general conservation interest--we were known as the Sierra Club and it related to the Sierra Nevada, period.

Teiser: But this had been, of course, part of your approach to photography, and so I suppose it was perfectly reasonable and logical for you to conceive this idea.

Adams: Yes, but I didn't feel capable of designing an exhibit. That was in Nancy's peculiar province--she could do that.

Teiser: She had designed exhibits at the Museum of Modern Art, for example?

Adams: Oh yes, and elsewhere; all were beautiful. But, you see, it isn't only designing an exhibit--you have to make this clear. An exhibit designer is given material and he does the best he can with it. But who organizes the material? That's what Nancy did. She researched and planned the basic concept and the development of the whole idea as well as the design of the exhibit itself.

She and David Brower of the Sierra Club worked together. She had the basic ideas and Brower contributed a lot. She very generously gave him the codesigner part and he's been copying the style ever since. "This is the American Earth" is Nancy's design--

Teiser: The book too?

Adams: The book as well as the exhibit. And it's her layout, and then a fine typographer did the mechanicals, as we call them--the actual spacing and all the details--for the printer, which is a field in itself.

Then when they wanted to put the paperback edition out, I insisted that Nancy be consulted on it. We had to make some changes, but I felt that these changes should be approved by her, seeing that it was her book.

Teiser: Did the original edition coincide in text as well as photographs with the exhibit? They were precisely the same material?

Adams: Quite close. There were a few things which were repetitive (which worked in the exhibit), that were not used in the book. But I'd say that it's very close, except that the text is expanded in the book. There was some poetic text in the exhibit, but nothing comparable to that of the book.

Teiser: Did you scan the photographs for selection?

Adams: Oh yes. You see, it was, in a way, unfortunate that the available resource of photographs were mine. I had to go elsewhere for adequate varied material. Well, who was there? Eliot Porter had some that fitted; Philip Hyde, William Garnett, and others. We worked hard to find things that related to our project without spending tremendous amounts of money and going all over the country in search of images. If we ever do a new version, we'll have to consider a much wider scope. Since the book first appeared, many new conservation problems have appeared and many new photographers have come upon the scene.

Teiser: Well, weren't most images to be found in the West?

Adams: We went all over the country as best we could. It costs a lot of money to collect photographs. And they're perfectly right in saying, "Never write an artist for an exhibit; go and pick it out." That's the only criticism of our Friends of Photography shows, that we had to rely on what the photographers sent us because we didn't have the money to hire a director to travel and choose. They would always be asked to send a lot of pictures, and we'd make the best exhibit out of them we could. But there is a very subtle difference there. If you write a photographer and say, "We want a show," he sends you what he thinks is his best, but that doesn't mean [you'll get a good selection]. With someone like Brett Weston--you can't possibly trust him to pick his best work. He's got the most incomplete, screwy attitude about his own work of anybody I've ever heard of. I mean it's just what at the moment interests him, and he says he's going to burn up everything else. God knows what he's already burned up because he's lost interest in it. He does beautiful work.

When you make a work of art it belongs to the world. You don't burn it up; you let somebody with experience decide, such as an art historian or a curator or a person who really knows on an objective basis, and trust their decisions. That's what you have to do; otherwise things are uncertain! There are many periods in art where painters and others have burned their work because they would become psychologically depressed about it or bored with it. They think it's not good, so they burn it.

Teiser: Well, you were burning what you considered imperfect prints one day when we were here.

Adams: Yes, but that's a different thing because I had better prints, and I'm still alive and I can make new prints. But burning negatives, that would be another thing.

- Adams: I have a lot of "junk" prints; I think anybody in the world would agree they're just poor prints. I have good prints of them from the same negatives. Let's get rid of the poor ones because they're not doing me or anybody any good. On the other hand, if I had something that was irreplaceable, even if it weren't a perfect print or if it were a damaged print, I would have no right to burn it. I've burned up a lot of stuff, but that was real garbage. That was throwing out the burnt soufflé, not burning the recipe. [Laughter]
- Teiser: By the time you and Mrs. Newhall got to work on this book, of course, you knew that your ideas pretty well coincided, so I don't imagine that you had much censoring of each other's.
- Adams: Yes, it's unusual; there probably should have been more. I can't really say that. I think that we're basically very sympathetic. I would sometimes pick one that I thought was better and which I could prove I had a better image of; that was all. Nancy was always very flexible. When she did the big show in San Francisco in 1963, she didn't agree with some of the things I wanted to have in it, and I would go around pouting, "Oh, I wanted--" But when I saw the show installed I realized she was absolutely right. It was too big and too repetitious anyway, but it still was an amazing job of selection.
- Teiser: So she has a good eye as well as a good knowledge of what you're attempting to say. I suppose balancing it to present a unified impression was her real contribution.
- Adams: Yes. And she used natural objects as gallery decoration. Then, of course, the matter of scale, the problem of what they call "vista." She used big standing screens and many things which enhanced the visual design. It was a stunning show, and of course it never looked the same anywhere else.
- Teiser: Where was "This is the American Earth" shown?
- Adams: The "American Earth" was originally in the LeConte Lodge. Later it was even shown at the John Bolles Gallery in San Francisco. I forget--did we have it at the museum? I think we did have it at the San Francisco Museum. It was at Los Angeles and the Museum of Science in Boston. But it primarily went to universities. And it went to some libraries, because it was organized in panels. It was sixteen panels, you see.
- Teiser: It was planned to be a traveling show from the beginning?
- Adams: Yes, and all crated. It was originally arranged, at Yosemite, to be stored, and we had on the panels certain hanging units that would go into hooks on pipes. That made it a little difficult to move to different places, but we just had to let those devices stay. Then when it came back to Yosemite for the summer it was set between the vertical pipe supports.

Teiser: I presume you did the actual printing for the exhibit and the book.

Adams: Yes, I did all the printing. I made a print from an Edward Weston negative, which was perfectly a God-awful job, to simulate his beautiful quality. I made prints from a few photographers' negatives as we had to keep the paper surface and tone consistent. If the paper and the print quality is not consistent, the show may look terrible. I would say, "I'll try to make this print from your negative, and you'll have to trust me." I think people knew me well enough, and knew that my technique was adequate to do it. But, oh, we had some troubles with that big exhibit, "I Hear America Singing." We got negatives from all over the country, and some of them were so terrible you wouldn't believe it!

[End Tape 18, Side 2]

[Begin Tape 19, Side 1]

Teiser: I had not realized that the exhibit, "This is the American Earth," went to a lot of colleges, but I know it had great impact upon young people. Were you aware that it appealed especially to the young?

Adams: Well, I don't know whether we consciously set out for that. You see, the young people "syndrome" today is a very complicated thing. It's a thing which a lot of people are capitalizing on, and I don't think it's entirely, in many cases, valid. The really intelligent young person is a person that you really have to pay attention to. And I think that the response to "This is the American Earth" was partly from old-timers who had a nostalgic feeling about the historic aspects and were a little annoyed the Sierra Club was getting into population control--and why should we have a picture of a famine in India, for instance, by Werner Bischoff? Then the young people suddenly realized that conservation did relate to the world. The Sierra Club never did anything for young people up until at least that time and even beyond. Young people climbed and hiked and enjoyed themselves. They were a very elitest group. But it wasn't really the young group as we know it today. Now the young people express a human emphasis, and while the groups that come to Yosemite climb and hike and camp--and I think it's wonderful that they do this--the whole wilderness mystique that we've been trained to think is important is not fully understood. It has changed; it's difficult to believe that no stream in the Sierra is safe to drink out of now. You see, it's just because of the over-occupation. Even if the population balance was ideal, it still wouldn't be safe. We must adjust to the present!

Adams: Some of my dear friends in the East--scientists--believe I'm just a little bit fey to think that a bunch of rocks has any human quality to it at all. They're interested in the human condition. They accuse me of supporting the pathetic fallacy. Then we have the millions of people, in the ghettos and in suburbia and on farms; wilderness to them doesn't exist--except the farmer likes to go hunting, or boating on some lake. And this experience which Colby and Muir represented, of getting people into the mountains to show how beautiful they are and how they must be protected for the future, was important indeed. My big argument for appropriate human use is supported by what Muir said to Colby at Glacier Point--I think it was in 1908--he said, "Will, won't it be wonderful when a million people can see what we're seeing today?"

But the purists in the Sierra Club and conservation groups are fighting that reasonable human approach. Some want to close everything off and limit its use to the very select few who can walk many miles and carry a heavy pack. There are people right on the board of directors of the Sierra Club today who'd like to close off Yosemite and El Portal and make everybody walk in with their pack, which of course is all right if you want to do it--nobody's stopping you from doing it. But they're so politically and humanly unrealistic that it's a very disturbing matter.

Teiser: I suppose the book, This is the American Earth, and the exhibit ["This is the American Earth"] simply intensified that conflict, didn't it--brought more people into awareness of the wilderness?

Adams: Yes, it did. It does two things: you notice there's pictures in the book there that are more factual than otherwise, and there are pictures in there that are entirely poetic. I'm very glad it was that mixture, because people could see and feel a related meaning. The last picture in the book has become a symbol of tenderness and appreciation of nature. You sometimes wonder how and why a certain image has such a tremendous impact.

Teiser: It is "Aspens, New Mexico." It was originally a Polaroid?

Adams: No, it's courtesy of the Polaroid Corporation. It is not a Polaroid photograph, but they bought the big print of it for their collection, and I gave them credit for it. It's not a Polaroid, but it could have been.

There are pictures such as Bill Garnett's aerial view of Los Angeles, and there's a prologue--leaves and lakes, natural scenes, which lead to the title page. Now, this was Nancy's idea. It is very unorthodox and very effective.

Teiser: Yes, how did you get away with putting so much before the title page?

Adams: We just asked, "Why not?" You begin with the prologue, then come to the title, then the astronomical image, then Minor White's "Rock Pool." This is where Nancy is absolutely superb--in putting images together and making them "work." You can't verbalize about the effect. The prehistoric image, the Petroglyph in Hawaii, the historical image of the Colossi in the Nubia area, and James Robertson's "Athens" (from the George Eastman House collection). You see, we drew on many sources such as George Eastman House. It was very interesting that the text relating to this sequence, or at least heading the Acropolis photograph, was left out entirely, by accident, in the first printing of the main book. It didn't make much difference; the concept was clear.

Then there's the Werner Bischoff image of India, which is a terrific photograph. Then one of Clarence Kennedy's photographs of sculpture suggesting the Renaissance. That's a very subtle image. Then there are several of mine, then one of Cedric Wright's, which is a magnificent photograph of a stump in a thunderstorm--one of his great pictures. Then you come to the cross at Truchas, which is a small image, but emotional.

Teiser: Was it on that comparative scale in the exhibit itself?

Adams: We tried to achieve a balance.

Then we come to the historic picture of the pioneer farm clearing and the Boorne and Sarcee Indians. And then Jacob Riis and many others.

Teiser: The ones that you said were not necessarily great prints were there because they expressed--

Adams: The development of the concept. Whether they are great photographs or not, they are important in a sociological sense. The Riis picture may seem inferior if you compare it to Arnold Genthe's "Chinatown," but it is still important because it is a vital document. A lot of people still believe that the whole function of photography is nothing but documentation, not related to what we call "print quality." For them, the "mystical image" is all an illusion.

Then we have two more landscapes, then Minor White's beautiful "Ax and Plowed Field," which is an intensely symbolic image; a wonderful photograph. And of course this is the kind of photograph that the average person doesn't see. People may not get the magic of this at first glance.

Then there's two old stereos that are purely historic. Then Bill Sears's "Cattle Driving," which is a good document; Ray Atkeson's "Log Pond"--very good, again. But they're not on the spiritual level of Minor's photograph. There again, you can't verbalize it.

Adams: You will see Bourke-White's ploughed field, which is a terribly good photograph. If that had been done by Brett Weston, you might consider it an "abstract." If it's done by Bourke-White, it may be considered a journalistic record! [Laughter] But it remains a fine photograph. If you held your finger over the title, there's four or five photographers you could say it's by, and all with different intentions. And the moon and the television mast in Hawaii, which is more prophetic than I knew. A good Cedric Wright picture again-- "Thundercloud"--no, that's mine; my gosh, I forgot! And this one, the "Trailer camp children," Richmond, California, has become one of my very important pictures. People can't believe I ever did it; it's out of my style.

Teiser: Who buys it?

Adams: Oh, collectors. They buy them from galleries.

Teiser: For publication too? Or just to have.

Adams: As fine prints. I sold two of these at \$150; they are beautiful prints. It's different from the expected Ansel Adams. You see, they think Ansel Adams is just thunderclouds! This is a very interesting thing--I've got a gold mine out there if I just get out the pictures that aren't in my traditional mode.

William Garnett did this--this is a good impression of smog, and then he has a whole series, from the air, of a housing development. We wanted to use the six pictures and didn't have space. It starts with an orchard, then the orchard is cut down; it ends with row houses. Then there's this incredible picture of his which is--now, you're shaking your head, and you're saying this is wonderful. Now, are you thinking of it as a photograph or as a subject? You see, this is the catch. You see that; it's Los Angeles. And the thing is so overpowering, you don't ask whether it's a fine photograph or not. It happens to be a very extraordinary aerial photograph, but what really gets you is the subject. And 95 percent of the "substance" of the photograph is the subject itself.

Then Wynn Bullock and Henri Cartier-Bresson. This one, I'm sure there's hundreds of pictures like this Ferenc Berko's of the Ganges. But because this picture was in this particular location in the book, it becomes important.

And Dick McGraw's "Smog and Mountains from Mount Wilson"--this is a very important picture. Then Nancy decided we wanted the exploding nebula, you know--the Crab nebula, which was a supernova. And the implications there are magical. You can't quite put them together at a logical level.

- Adams: This is the one that I made an enlargement from an Edward Weston negative. To simulate the quality of his original print for the exhibit was very difficult.
- Teiser: Which is that?
- Adams: "Cypress and stonecrop, Point Lobos." Nancy's text works well with this one. Then my own grass and burnt stump carries the mood. Bill Garnett's gorgeous picture of the flight of snow geese is one of the greatest. He said it should have been this way!
- Teiser: You have it upside down!?
- Adams: It may not seem right. I think it's because of the position of the sun. That's one of the great photographs. So then there's two more landscapes, semifactual, of San Francisco--
- Teiser: That's your cultivated field with the irrigation?
- Adams: Yes. That was part of the American Trust Company book.
- Teiser: Do you consider that characteristic of your work?
- Adams: It would be in the sense that it's a "near/far." It is very sharp in the foreground; also very sharp in the distance. It's not an extreme example. And this one of Shasta Dam with Mount Shasta in the distance--that again was done with a long focus (23-inch) lens--perfectly hideous to print because of the haze and smoke from forest fires. I can think out all kinds of design relationships. But the picture still has to have a certain amount of information and tonal beauty. This "San Francisco from TV Hill" gives the idea that right next to San Francisco is beautiful wild country which may be ruined very soon by developments. The skyline is completely outdated now.
- Teiser: That was one for the American Trust book, too, wasn't it?
- Adams: Yes. We have Edward's beautiful picture, the grasses; Pirkle-Jones's sun and wave; and Gerry Sharpe's fine image of the boy with the horn, the little kid at the jazz performance, which has really quite a poetic impact. Again, you can't possibly verbalize on these things. Here's a kid surrounded with lights and horns--an artificial environment--but there's something in the face that has the continuing human quality. Nancy's poem with that picture is beautifully related. When you read it, you see how it fits with it.

Another landscape, probably superfluous; then the book ends with good old Sierra Club nature. [Laughs] Mount McKinley and the northern New Mexico aspen grove.

Adams: So it's a cross section of the factual and the emotional. The book had a terrific impact. But I'd like to see a whole new exhibit-- "This is the American Earth, 1973." It would have to be a totally different thing; it might not have that particular poetic significance. There may not be enough suitable pictures easily available. It would have to be something different. There are many gorgeous pictures done in color, if we can find them. You can't put a color print up on the wall because it may fade, so you have to settle for fine reproductions. The Audubon magazine is just marvelous. We should go to the extreme, first show the beauty of nature, great things in grandeur and in the detail, and then make a sudden shift to the damage man has done.

I think now you must show the damage. But the point is, just showing a garbage dump is not really effective. For instance, I have a picture of a garbage dump outside of Lone Pine. I used a wide-angle lens, with disturbing effect. It was a very small, inconsequential area. There has to be a garbage dump somewhere. People make movies in Yosemite with wide-angle lenses in the parking lots, giving the impression the whole valley is nothing but packed automobiles, and that's also wrong because it's only a very small part of the total area. So how do you imply damage?

Ecology and Rationality

Adams: You have a certain number of people like--well, one of the sensible ones is Barry Commoner. But many other people who are continuously yakking about pollution--they give the impression that every fish is dripping mercury and every pelican is full of DDT. Of course, this is completely wrong. The alternative to that would be that if you cut out DDT, there would be twenty million people dead of malaria and we'd be guilty of genocide. It seems to me that if you get emotional enough the facts automatically disappear! This has probably happened in most religions. In fact, my old Greek teacher, who was a fundamentalist and criticized me because I was reading Shelley (who he considered to be an atheist) was following the fundamentalist dogma. I think there are people today talking about ecology and pollution and conservation that are following an equally spurious dogma. And I'd like that to go on record, because I think it is a very dangerous situation.

I think I should say here that even some of Nancy's pronouncements have been very severely criticized by scientists. And one of my dear friends is Tom Jukes, who's a very great humanist, but he's also a great realist, and he felt that she overdid it in what he called the "Rachel Carson manner." Many scientists objected to

Adams: Carson's book, because she did not have the inclusive scientific backlog; they criticized her especially because she was a biologist and she should have been a little more precise: "Give us the proof." Silent Spring is, I think, one of the great, really great books, because of what it indicates--and I think she's absolutely right on principle. But the scientists said it loses strength because she doesn't sufficiently document her facts.

But the truth is that the pelicans are not as affected by DDT as people said, and fish are not as affected by mercury, and there is no known cancerous development in a human being by many heretofore suspect substances.

People like Brower and a few others are, in their way, blind fundamentalists. They can make terrible errors. And a person like Tom Jukes will say, "Well, I know DDT is poisonous and has done a lot of harm, but why aren't we spending a billion dollars developing a safe control of pesticides, instead of going up and finding some dust on the moon." He is a fine scientist, and he's been working very hard in his field. The government doesn't think that way. If we spent that amount, we could very well find a "safe" pesticide. They have one now that they claim has got a great future, only it disappears in twenty-four hours; but it does its job. The great tragedy is, if it does kill off insects, it breaks the biologic chain of life.

A man like Dr. Land is extremely concerned with the larger picture, and instead of going out and getting emotional about it and saying how terrible this is and how terrible that is, he will say, "You've got to make up your mind, now. You want to reduce the population by 50 percent? Because if you did that right now, by shooting every other person, you think the world would be a better place--it would not!" Certain moral codes, legal and ethical codes do not give us the power to eliminate every other person. We have to leave that to an epidemic or a meteor--even a hydrogen war or, better, to world-wide education on birth control.

Dinosaur bones are fixed in deep strata that give information on an approximate time of the demise of the species. We have found certain places where apparently thousands and thousands of mammoths had grouped together and died. What was it? Was it a drought, a flood, a great tidal wave, or a meteorite? Something happened which produced the extinction of these "people." (We say "people;" at that time they were "people.") What happened at the time of the dinosaur? Why did they die? Nobody's answered it. They were a reptilian group. They were cold-blooded, and we either had a tremendously cold or tremendously hot episode on earth, because the sexual apparatus (whatever you want to call it) would disintegrate under either condition. We have temperature control, so we can

Adams: survive extremes of heat or cold, but the reptilian world couldn't. Perhaps something happened in the sun causing temperature variations. We are living in a blissful period of combined national and human affluence the like of which has never been known, at least in our history.

Teiser: This picture, "Bathers on the Ganges," in This is the American Earth-- I look at that and I think that people will flourish in spite of anything. They have very few temperature controls for those people. They have very little shelter, very little food--

Adams: The fortunate thing is they live in a hot country. There must be terrible disease, but they do not suffer cold. Sometimes, but most of India is apparently very hot; people sleep on the streets, the roads, and they die of malnutrition or get all kinds of terrible diseases. That picture was taken probably fifteen years ago, and chances are that now everyone in the picture is dead.

You have a nostalgic thing--you look at a crowd listening to the Gettysburg Address or a photograph of individuals or groups from the 1880s, and you think, "Everybody there is dead now, even the little kids--all are completely gone."

Book Publishing

Teiser: When did the idea of making This is the American Earth into a book come to you?

Adams: About a year before we did it.

Teiser: You hadn't intended to make it a book all the time?

Adams: No. Not until we had the exhibit completed.

Teiser: I see--the year before you actually made the book.

Adams: The exhibit was so successful, everybody said, "Why not make a book?"

Teiser: It's gone into many editions.

Adams: Oh yes. The first printing--'59, '60--

Teiser: The introduction is dated August 1959, and it's copyrighted 1960.

Adams: Well, that's all right. Yes.

Teiser: And the first edition was hard cover?

Adams: Yes. To do this book we needed money. I knew Dick McGraw very well (he's a dear friend and a neighbor over the hill) and his father, Max McGraw, of Chicago. Thanks to Dick's efforts we got a \$15,000 grant from the McGraw Foundation, and that started us off, and we got the book ready for the press. Then we said we needed \$12,000 more to print it properly. We borrowed \$12,000 from the foundation and paid them back from the first proceeds after we paid off the printing bill. As soon as the proceeds came in--this is one of the few really solid financial things the Sierra Club's done for twelve years--we paid back the McGraw Foundation every cent. Of course, they gave us the \$15,000, but it cost about \$25,000 to do it. And it was quite a success.

It was about that time that Brower began to get enthusiastic ideas on printing. And we did the Cedric Wright book, which I think is very fine, and that's been going through several reprints. That was in black and white, so it doesn't cost so much. Then Eliot Porter's book, In Wildness, our first venture in color, has been a great success, although it cost a great amount of money because it was printed in small numbers. You see, that raises the unit cost, but again, one can't take too much of a chance. In other words, if you have a book that costs \$7 cash to produce, and you print ten thousand copies, it adds up to \$70,000. Now, if you print twenty-five thousand at \$5 it's \$125,000. If you printed whatever the number of copies were that would come to \$25,000--if you did that, you might come out financially "on top." But there's no way of knowing this in advance.

Of course, the actual first printing is always a costly one, because that has all the plates and the "mechanicals" and the typography. One hopes to really make money on subsequent printings, but if you don't print enough--you only print two or three thousand--it still costs a lot of money to get it on and off the press!

Teiser: In the introduction there's also an indication that there was financial help given by the late Marion Randall Parsons.

Adams: That was to the exhibit, not to the book.

Teiser: Then in 1968 there's a copyright "Sierra Club and Ballantine Books," so that was when it went into paperback, was it?

Adams: Yes.

Teiser: The original volume was not produced in the West, was it?

Adams: Well, it was printed by the Photogravure and Color Corporation in New York, and the story there is very interesting. I dropped in on their office in New York, and they were just about ready to go to press. They showed me all the proofs. When you print with gravure, you print on copper sheets and you can't change anything. It's etched--the type, everything. Well, Brower and the other people had not proofread anything, and on the first three pages I began to see glaring errors. I ordered a stop to everything, and we went carefully through it. The errors I caught in that printing cost \$780 to correct and re-plate. Brower had passed it, but no one had ever proofread it. By luck, I just happened to drop in and say, "Let's see how it's going," because I was on the publications committee. They had Bill Garnett's name all wrong; they had titles wrong; they had misspellings. You never saw such a mess in your life, and every time you changed a detail you had to re-make a whole plate.

Fortunately, in several cases there were corrections on all four pages on one plate. There were still a few errors that slipped by. When I did the revised edition of Book One, Camera and Lens, it was all done with the IBM typesetting machine. The publishers didn't have adequate operators. They'd send these terrible galleys to me, and I'd correct them. Then they'd send them back corrected, but there were many new errors. Something new would happen! The first edition of that is full of typos. The second edition is pretty good--I only know about one bad error.

But the best proofreader I ever knew was the man at H.S. Crocker Company who had a little office and a secretary. He was remote. And he read every word, every letter, every comma. He'd call you up and say, "Do you really mean what you said here? I don't think you have the right verb form here. We noticed this plural at the first part of the paragraph"--that kind of thing, which is just incredibly helpful. Most of the things that Crocker did--in fact, almost everything--were quite perfect. I never found anybody else that good; he had a kind of creative interest. (I wish I could remember his name.) But he'd always manage it without sounding critical. He'd say, "Now, I've just been reading this, and I find that the first part of the paragraph is in the plural sense, and it becomes singular further down, and I wish you would look at it and tell me--"

Most proofreaders read backwards, you know. Forward and backwards to see if it's correct in all ways. They seldom read for the meaning at all. They assume the meaning is all there. This man took nothing for granted!

Teiser: In this, did you get enough financing to pay the photographers and the writer? I mean, did everybody involved get reasonably paid?

Adams: Well, of course, the only writer was Nancy. No, she didn't get anything. I didn't get anything. We paid the other photographers \$25. I think that they all got \$25 a print, and that was it. She got expenses and a few hundred, but it wasn't anything much.

Well, now wait a minute--we have to be clear about this. That was expense; but we got royalties. But the royalty was on a flat 10 percent of invoice, which was really about 5 percent on retail, which is not exactly kosher.

Teiser: But the Sierra Club must have cashed in?

Adams: I think it came out all right with this book but probably lost a lot on most of the other books. All our exhibit format books have averaged out about a dollar loss. Little business sense was applied. Every book was priced all out of relation to the original cost. I think I mentioned before that the production cost of a book cannot exceed 20 percent of its selling price. If you have a \$10 book, you cannot spend more than \$2 in producing it. Production includes the plates and design and typography, printing, paper, binding, dust jacket, and the container. And that's one-fifth--20 percent.

Now, you look at a book that is sold to the dealer. On a \$10 book, we get \$6. The cost of distribution is 15 percent, whether the publisher does it or whether they hire somebody to do it. So the publisher gets \$4.50 back. That's what he hopes to gross from a \$10 book. Out of that, he has to pay a dollar royalty, which leaves him \$3.50; 50¢ promotion, which leaves him \$3; 50¢ overhead, which leaves him \$2.50 (that's his own office overhead); and 50¢ profit or reserve. That leaves him \$2. If you sell by mail or have your own people do it or hire a distribution firm, it costs about 25 percent. And that's the fundamental publisher's arithmetic.

Now, the costs have gone up so much that they are inclined to include publicity in the first 20 percent because financing costs more. So if you say, "We spent \$3 in producing this book," that must be a \$15 book, or more.

These are some of the realities of publishing, and whether they relate to a particular book is not the point; it is a general assumption. The American Earth is a very successful reprint.

Teiser: It's beautifully done.

Adams: Well, that's the trouble. Costs are high and the profit margin very low.

When we did the My Camera series, the big press at Crocker's was operating at a cost of \$75 an hour. Today that same press would be, I think, over \$300 an hour. And that's just the press operation!

Teiser: And you were entirely satisfied with that?

Adams: Oh yes. But letterpress is little used now. It's all offset or double offset printing. And I think quite satisfactory. If you look at that little brochure for the show, you'll see where the letterpress printed through. A picture will be on one page, and on the back you'll see the imprint of the plate because the letterpress is like billions of little dots--points--and requires a hard impact. And with offset just enough pressure is needed to transfer the ink. So you don't have this awful thing called "print through." In the My Camera series, the text that was printed on the back of the illustration was done with soft rubber type. Then later, of course, it was done by offset.

Teiser: Does Crocker now do high quality duo-tone offset?

Adams: Yes, they do beautiful work. They did very fine books. They did the Wynn Bullock book [Wynn Bullock. San Francisco: Scrimshaw Press, 1971], and they did the Delta West. Their work was a little contrasty, but they claim that's the way that the artist wanted it.

Teiser: Delta West is too contrasty to my eye.

Adams: But Roger Minick's prints were contrasty. And I think most of that country is now flooded out, so it is a valuable record.

Well, anyway, [George] Waters has consistently made the best reproductions I know of. What's the press in New York? (They print Aperture.) Rappaport--they've done some beautiful stuff. I'd like to have George Waters do all my things, but by the time you print it out here, at higher costs than in the East, and send it east for binding, you find the costs are quite high. Binding in the West is much more expensive. They're trying to equalize it now.

Well, I think the American Earth is a classic and will continue to be that. But I'd just like to see something new happen--volume two, you know.

[End Tape 19, Side 1]

Work in Progress

[Interview XVI -- 8 July 1972]

[Begin Tape 19, Side 2]

Teiser: You've been cataloguing?

Adams: Yes, most of my negatives weren't properly organized.

Teiser: Have you pretty much of a catalogue of your work, then?

Adams: Oh yes, in a way. But it's not scholarly because I'm pretty bad for dates, and all the records I had of earlier work were burned up in Yosemite, and a lot of names and dates of the early New Mexico things are missing. I just found all kinds of things today. I found glass plates--I don't know who did them--of Yosemite, years ago--very good ones. Also a beautiful set of Bufano sculpture negatives I'd done. I am trying to "clean up" and be sure I'm not missing anything when I start printing. I'm just starting to print for several exhibits and books. I'm also trying to find things for Portfolio Six. I have a whole series of things, an old collection of pictures I made of New Mexico forty-five years ago--fantastic Spanish-American types and architecture. It's tricky to know how to print them, because you can't obtain the paper of earlier days. They're not the kind of negatives you can print easily. I should print them fairly small, and tone them fairly strongly, to give them a different feeling from my contemporary work.

Teiser: Do you have any prints you made from them originally?

Adams: Some old grey prints and proofs. [Laughter]

Teiser: Not good?

Adams: Mostly terrible!

Teiser: Well, you're working on about five projects at the same time.

Adams: Yes, I have--let's see--exhibits in San Francisco, Fort Lauderdale, San Antonio, and the big New York show in '74. That's four exhibits. Two books. The monograph's done, thank goodness.

Teiser: Two books?

Adams: A revision of the Polaroid Manual, and the production of Portfolio Six. Plus a constant influx of print orders, and then more work for Polaroid.

Teiser: I have this list of Arizona Highways articles; there was a series of them over a period of two years. Did you take photographs for them, or were they photographs you had?

Adams: No, most I did for them. Organ pipe cactus, and Canyon de Chelly were done for the National Parks Project. Then we did Mission San Xavier del Bac, which was later turned into a book. That's always waiting to be reprinted, but nobody's put up the money for it. Not that it won't sell, but it won't be practical to reprint unless you have a subsidy. It has an excellent text.

The Pageant of History in Northern California

Teiser: We haven't talked really about the book for the American Trust, The Pageant of History in Northern California. How did that project start?

Adams: Well, actually [pauses] the project was thought up by the late Roland Meyer of H.S. Crocker. He presented the idea to them, they were interested, then he got hold of me and said, "Would you and Nancy like to do it?" We said we would. Then, ironically, while the bank went ahead enthusiastically with it, Crocker didn't get the printing job! because they had a huge job of making the color reproductions of the [Miguel] Covarrubias maps for the American Trust Company. And the bank had to divide the projects between their two customers, Carlisle and Company and H.S. Crocker. So really Crocker was set to do the color project, so they switched the black and white book off to Carlisle.

Teiser: We have a copy that has two page ones--a bonus. [Laughter]

Adams: You have? Boy, that's lucky!

Books are printed in signatures, as a rule, in whatever sheet size the press can take. Then they're folded. Now, when you do a book of this kind, a big print crossing two pages, you get the ink for the divided plate; but the parts may be on different signatures. One of the great difficulties is obtaining a properly balanced inking.

Teiser: Since Roland Meyer's company didn't do the printing, who planned it with you?

Adams: We went to the advertising agency, which was McCann-Erickson, which were the American Trust agency. (The people involved in it are retired now.) They took it on. They made all the arrangements. I worked directly with a man named Ken Jones.

- Teiser: Whose concept was it, that a book of that particular character should be done?
- Adams: I think Roland Meyer's. They wanted a good job, and a book of this format was proposed. They gave us the size we wanted, but they couldn't give us all the pages we wanted. It was based on trying to photograph many areas of Northern California, wherever the bank had a branch. I think the title is terrible; Nancy and I wanted the title "The Triumph of Enterprise," which seemed to be much more logical. It is, you know, the whole development of the state. And one of the vice-presidents was very conventional, thought we were nuts, wanted this dull title, and that was it. But they didn't interfere at all with the content; they were very good in that respect.
- Teiser: Did you and Mrs. Newhall do an outline of the idea?
- Adams: Yes, we picked the subjects where we would work and submitted those, and the agency thought that was fine. So then Nancy started to write and I made pictures. Some of these I had, but most of them were made for the project.
- Teiser: Could you go through and tell us a little about some of the individual pictures?
- Adams: Well, I did that for them.
- Teiser: The Golden Gate title page photograph, showing the bridge, which goes across two pages.
- Adams: Here's an interesting thing--we knew how the page would be divided, and I was down on the beach for a long time watching the waves. They had made rough, thumbnail sketches which never match reality. I would feel, "Well, here's a breaker coming in, and that might be good for the page division," and one worked out perfectly.
- Teiser: That really is preconceiving a picture! [Laughter]
- Adams: That's unusual. You don't have to do that too much.
- Teiser: What time of day was that taken?
- Adams: Oh, that was taken pretty close to noon.

Then I had this one of the sunset, "The Pacific at Sundown." That was a stand-by, an early photograph. I had this one on hand, "Mount Williamson, East side of the Sierra Nevada, clearing storm." I also had "Point Sur, Storm." But I did this one, "Fog and Rock, Mendocino Coast," and I did many others for the book, "North of Point Reyes" and "Point Lobos, near Monterey."

Teiser: A picture like that, Point Reyes, in which clouds are so important, how do you get it?

Adams: Oh, you just go out and drive about and all of a sudden you see something. You recognize it as being possible, and then you visualize it, and expose the negative.

Teiser: I wonder how many hours of driving you've done in your life for each photograph you've made.

Adams: I don't know; it's very large. I've driven over a million and a quarter miles, I know that. Checked it all out, and it's about that.

This one, "Marin Hills, from across the Golden Gate," was taken for the book. We wanted to get the Golden Gate hills, and again I had to wait for clouds. You know, you don't have that very often. And the San Juan Bautista bell, and the Stevenson house—all made for the book.

Teiser: Those are the first photographs in the book of man-made subjects. Everything before it is nature as it could have looked at any time.

Adams: Oh yes. Well, it's in theory what was here. Then of course the city picture, "San Francisco from San Bruno Mountain," the skyline is hopelessly outdated now. I've got to get up there again, before they ruin all the foreground.

Fort Ross, and "State Capitol, Sacramento," numbers 11 and 12, they were done for the book.

Teiser: Where were you when you did the state capitol?

Adams: On top of some bank there; I think a competitor bank. And I used a very long lens. It's very interesting. It was done with the Hasselblad. In the book it's impossible to tell what camera the pictures were made with. And any one that you've seen so far, with the exception maybe of Point Lobos, when I had to swing the camera back to get this great depth of field from the foreground, and Mount Williamson—all of these could have been done with a Hasselblad, and you'd never know the difference—except in minute detail.

Another one here, "Vallejo's House, Sonoma," it's made with a standard 4 by 5 view camera. You see, the camera is very near to the fence. You have to have your back parallel or else your house is distorted. You tilt the lens to bring the near and far planes in focus.

- Adams: Then this one, the daguerreotype, "Early San Francisco"—this is quite a difficult thing to do, because it's quite a task to photograph daguerreotypes. You should have the whole camera and everything shrouded in black velvet, and there's a little peephole for the lens; but even then, unless the lens is recessed, back in a big shadow box, you get a reflection of the lens, because the daguerreotype is a metal mirror. So what we do is to have a black surround, then we have a lens that has a wide field that will cover a large area, and we put the axis of the lens over the edge of the picture. That lens is pointing here--beyond the edge of the image.
- Teiser: Above it. I see.
- Adams: The back must be parallel with the image, and everything has to be absolutely level, and the lens has to have adequate coverage. And using a lens like a Super-Angulon you could do that. You'd never get any distortion. With this technique you avoid the reflection of the lens. Then, this daguerreotype had a couple of bad scratches in it which were slightly retouched. We thought it didn't do any good to leave the scratches in. That could be done on the engraving plate.
- Teiser: A Polarizer will not suppress the reflection that way?
- Adams: A Polarizer, yes; if you use one on the lights and one on the camera, you'll get cross-polarization with the camera head on, but it won't do too well. And one of the reasons for that is that with the substances which allow the control of the polarized light reflected from them--the light comes on them at random and penetrates to a certain extent into the substance, like varnished wood or glass or water, and in its reflection it is polarized at about the 56-degree angle from the norm. When you want to remove the reflection from a window you have to set the camera at about 56° from norm. If you put the polarizing filters over the lights and over the lens at opposing angles, then you can photograph head-on and kill all reflections like glare from paintings and glass.
- Teiser: Can you use the Polarizer copying an ambrotype?
- Adams: I think so. I think you could. But that isn't metal.
- Teiser: It's glass, isn't it?
- Adams: Yes. Then I copied the American River, "Miners at Work." That's from the Zelda Mackay Collection,* and that is an actual gold nugget stuck on the daguerreotype. It's very odd and unusual.

The "Gravel bars, American River" and "Old Cattle Brand and Ear Notch" at Mariposa, "Redwoods, North Coast Country" I'd done earlier. I did some redwoods pictures for them, but didn't like them as much as this one.

*Original is in The Bancroft Library.

Adams: "Sierra Dawn" really is a sunrise over Westguard Pass in the Inyo Range. "Rusted Shutter, Volcano," and "Rolling Hills," Sonoma County were done in spring, before. (It is not Mendocino County; it's Sonoma County—this is a mistake.) "Moravian Church, Jackson" turned out well.

Teiser: I was looking at that and trying to decide what this flat surface is above the church.

Adams: It's a mesa—an erosion of an ancient lava flow. It is more what we call a table mountain. "Fisherman's Wharf" is on early Polaroid roll-film.

Teiser: It was originally sepia?

Adams: Yes. It came out beautifully in reproduction.

This "Porch Column, Columbia" is 8 by 10. This is going in the monograph and a portfolio. "Church, Bodega" was made with a wide-angle lens on 4 by 5.

Teiser: Hasn't that been used since very frequently?

Adams: Yes, I've used it in many exhibits and lectures.

This is a very old photograph, "Old Statues, Sutro Gardens,* Land's End, San Francisco." We put this in for historical reasons; it didn't exist at the time the book was prepared. These cement replicas went to pieces in the 1930s.

Teiser: You did take a whole series of Sutro Gardens figures, didn't you? How did you happen to do that?

Adams: The place gave me a very exciting, very strange feeling. These figures were all cast in cement—duplicates of classic figures--which Adolph Sutro set all around the parapet.

Teiser: Was that before you knew Dr. Kennedy?

Adams: Oh yes.

Teiser: Did you just keep going back and back from time to time and taking more pictures.

Adams: Yes; I also did a tremendous series of images in Laurel Hill Cemetery and other cemeteries in San Francisco. I have one that is a sphere in weathered stone, and there's a little angel, perhaps a child, leaving the earth, leaving this sphere. And it's very abstract, almost oriental in feeling. I tried to acquire the original stone

*Usually referred to as Sutro Heights.

Adams: when the cemeteries were moved, but they had plowed it under. There's a little detail of one of the stones there on the shelf that I was able to save. But this photograph was done—I did a lot of these things—on my own.

"Gilroy Valley" was done very definitely for them. As well as "Pit Five Power Plant, Pit River."

Teiser: And the Shasta Dam also?

Adams: Yes.

Teiser: That's just amazing!

Adams: Well, I went around. I'd been around the dam for the PG&E Fortune magazine essay, but I didn't have anything that was really right and up to date. Then I had had weather to contend with—a forest fire.

Teiser: How did you get Mount Shasta with the dam?

Adams: That was fairly difficult. It was done with a very long-focus lens, an extreme red filter and prolonged development of the negative.

Then, this is the Delta-Mendota Canal. The new canal is wonderful. But I had a terrible time with the cotton fields.

Teiser: I thought that cotton blossoms like that were difficult to make look like cotton.

Adams: They're just terrible, and they're always moving in the wind. And they have no definite "design." The old man who owned these fields was a quite famous character—he did a great deal for Israel; showed them how to raise cotton.

Teiser: Hamburger?

Adams: That's it. And he had terrible opinions of the American Trust Company. I went there to see him, he says to me, "Vat! You vant me to let you take a picture of my cotton for the American Trust Company?" [Laughter] Well, then there's a few things I can't put on here. I said, "Look, Mr. Hamburger, I'm stuck." He said, "For you, yes." I think they'd turned him down at one time in some financial deal.

Then I did "Irrigation, Lettuce Fields" in the Salinas Valley. And this one is up at Davis.

Teiser: "Graduate Student." Was that used again in Fiat Lux?

Adams: Yes. It's an excellent picture of pollenizing alfalfa, and I tried several others but got no better pictures, so went back to that one.

"Feed Silos and Truck," Petaluma, is exciting, I think.

Teiser: Where were you--in a pit or on your stomach, taking that?

Adams: I was right down on the ground, with a wide-angle lens. The truck was loading up. "Rice harvesting, Woodland-Sacramento area" was in the Sacramento Valley. The orchard scene is south of San Jose. We knew we were going to need a "double truck" of that, so I did several variations. I didn't realize this was going to break up so much in design.

Teiser: The division is right in the trunk of the tree.

Adams: Yes, it might have been a little more off center. "San Francisco from Twin Peaks," the cloud shadow was just coming on City Hall. There's a very funny thing about this: Down here, at the west end of Market Street, is a Bank of America sign, and we had to take that out. No one would know it had ever been there! In fact, the engraver's retoucher put in a couple of extra buildings so you can't see it. It was a great big sign, "Bank of America." [Laughter] Perhaps not "purist" photography, but...

"Waterfront, San Francisco" was done from the Bay, with a Hasselblad. That is also a Hasselblad picture, "Steel Construction, Richmond-San Rafael Bridge." You see here and there the difference: the color of the reproductions. The printer wouldn't listen to me. At Crocker, you used to be able to go in the plant and discuss details with the man, and we got along fine. But at Carlisle they just threw me out. They said they knew more about printing than I'd ever forgotten. They'd forgotten more than I ever knew, to put it right.

I'd begged them to highly dilute the varnish, otherwise I knew it would turn yellow. And they said, "No, we know what we're doing, Adams." And so I figured, "All right." And I reported to the agency, "You better tell them to use thin varnish or the plates are going to turn yellow." Well, the agency had the same trouble with them. And they put on too-thick varnish, and some of the plates turned very yellow.

Teiser: "Oyster Shells, Cement Plant" did.

Adams: But this one has thinner varnish, and it didn't discolor so much.

Teiser: This pattern of pipes is fascinating.

Adams: That's at Long Wharf, Richmond, at the docks of the big tankers. And this, "Petroleum refinery, Oleum," is at the Union Oil refinery. "Rails and Jet Trails, Roseville" is a Hasselblad picture. That's in the great freight yards. It's really worth your neck to be in there, because these cars are being shunted magnetically about. I was surprised they let me in there. They shouldn't have; it was dangerous! I saw this jet trail, and it was perfectly beautiful in relation to the rails. But just as I photographed it a freight car came zooming down upon me. I had to jump fast!

This is of the telephone microwave horns in the Berkeley hills.

Teiser: Yes, that's a fascinating contrast to the picture of putting together the miniature component on the opposite page.

Adams: At Varian Associates. Yes--both relate to the same field of electronics. I don't think these original horns are there any more; these square metal "tubes" are what guide the waves into the amplifiers. The waves are amplified and are beamed directionally to the next receiving "horn" or antenna.

Teiser: Oh, that is the San Francisco telephone building in the distance.

Adams: In Yosemite the telephone lines go west to a point above the Wawona Tunnel, then to Merced by microwave. We have a telephone in the kitchen and a telephone in the bedroom in our Yosemite home. We had the kitchen as a studio phone. If you want to call the studio from the bedroom, it has to go through the regular circuit all the way to Merced and back. [Laughter] Then they have the pick-up from the High Sierra outposts, which is up near Sentinel Dome. It's really a marvelous thing--no wires! They have to be in the "line of sight." From Berkeley the waves go all the way to Cisco Buttes. And from Cisco Buttes to Mount Rose, Nevada, and from Mount Rose way over into Utah. In the receiving station rooms, the currents come in very weak and they're powerfully amplified for the next transmission. In one station there were six television shows and six hundred conversations at one time going through in different frequencies. And there were small monitoring television screens on the wall--

Teiser: Were men monitoring them?

Adams: Hardly anybody's ever there. I know at Cisco they gave me a key and let me go alone and take the pictures. I thought, "Of all the crazy things to do." I said, "Is somebody going with me?" "Oh no, you can be trusted." Gee, I could have thrown out the whole system. [Laughs] When I went in this room I made my pictures and got out of there fast. I didn't want to be around in case something happened. I made some pictures outside. But it was a kind of responsibility. I wouldn't touch anything, but suppose something had happened! They wouldn't be so casual now. [Laughter]

Adams: In the "San Francisco-Oakland Bay Bridge" we see the last ferry boat. And you can tell the date by the two-way lanes and the style of cars. That is taken from right over the west arch of the tunnel.

Teiser: Oh, on Goat Island.

Adams: Yes. I had quite a job there. I had a tripod that locked in maximum spread, and I had shortened one to the limit and lengthened the others to get the thing set, and then stood on the camera case (which was placed on end) to be able to focus and get the picture. I was right at the edge. Of course, had I ever fallen off that thing, I'd be finished. I tried to get up in the tower, and I couldn't even arrange that through Sacramento. They wouldn't give me permission for safety reasons.

This picture of the University of California was done for this book. I had a different problem--two dull pieces of architecture to contend with. By stylizing them with convergence they may be improved, as with this picture at LeConte Hall and the Academy of Sciences Building in San Francisco. That black cloud reflected in the glass of the Morrison Planetarium door is very much like the black cloud in the Orion nebula, by coincidence! Several astronomers have noted that. They say, "You know what that looks like?" I say, "Sure, it looks like the Horse's Head Nebula in Orion." [Laughs] But this is such dull architecture that if you just do it "head on" and unimaginatively, it's nothing.

This final one of Yosemite ends the book.

Teiser: Who took that photograph of you at the back there?

Adams: J. Malcolm Greany up in Alaska. It is one of the best ones I've had.

Teiser: Where was that taken?

Adams: In Juneau. I didn't give him credit for it. I apologized.

The book cover was also done directly for it. We wanted to show the ocean.

You take many, many pictures you don't use, but this was very efficient, really.

Teiser: Over how long a period did you work?

Adams: Two years. And right after that I had the job to do in 1958 for the Bishop National Bank in Hawaii--went over there several times for that. I tried to get Nancy for the next, but Ed Joesting, who was in the bank and thought up the idea, wanted to do the writing. And he's a very nice man but his style of writing is what you might

- Adams: call "Hawaiian pedestrian." [Laughter] And he couldn't stand Nancy's writing because, of course, it was emotional. I said to him, "What is the purpose of communication, to excite you or just--" I didn't want to say "put you to sleep."
- Teiser: The American Trust book was not done in a very large edition, was it?
- Adams: I got one the other day. Had to trade a print for it! I've got one now for each of the kids. There were ten thousand of them, I think. A pretty good edition. They gave them away. They still have a little pile of them in the cellar, I am told.
- Teiser: Is there any possibility that they'll ever reprint it?
- Adams: No, it's obsolete except for the general scenes of California.

Making Photographs, 1972

- Teiser: Is there any possibility that they'd bring it up to date?
- Adams: Well, things are done so differently today. If you did something like it today, it would have to include color. The revisions of my Basic Photo series would, of course, be in black and white, but they represent specific techniques. You know, I'm just beginning to realize the possibility now--what's the term?--"You've shot your bolt." In other words, I go out with a camera now and I find myself wanting to make photographs. I'm all excited. And I set the camera up and I look in the ground glass, and I realize I have done it before and better! I suppose if I went to Europe or North Africa I'd see different pictures. But I don't really think that I can see things different. I've got to share a kind of revolution--a new technique, something. I have this burden of all these negatives I haven't printed. So, after all, you come to a point where you start potboiling, and that's the curse of many artists. I would probably be very smart if I got rid of every camera I had and just said, "No more photographs," because I haven't made any good ones lately. I just keep duplicating pictures and making tests. Because literally every time I look in the ground glass I see something, and I say, "Gee, that looks nice." But, as I said, I've done it better; I've done it before. It's a copy; it isn't just the same scene, but it would be awfully hard to do anything like the moonrise in Hernandez, New Mexico. Something might happen tomorrow, something magnificent, and I might capture it; I don't know. But the chances are pretty much, having done it, I could do many things like it, but would they be better?

Adams: One thing I keep thinking about is I'd like to do more with portraits, because I always have had a certain sympathy with that field. It is a challenge, because you have a person to work with that might be a totally new world. Each person is something. It's not like nature. Nature has different aspects, but people have different personalities; each is really a problem.

Now, we have a situation right in this house which is absolutely wonderful for portraits, which is low sunlight, reflected in the window. And it casts certain qualities of light like you find in the works of Lerski.* (I think he was Lithuanian or Czech.) And he did mostly peasant types by "filling in" sunlight with mirrors. I did the portrait of Annette Rosenshine that way. You know her? A sculptress--marvelous old lady. We met her in her old apartment in Berkeley, which was stuffy and dark, and she wasn't the kind of person you'd take out into bright sunlight. But she was pretty chipper. She had a marvelous face--slight harelip, a slight distortion. When I did her as a younger woman, we sort of avoided that, but she said for this new picture, "No. I want it honest." I sat there (Virginia was with me) and I thought, "What in the world do I do?" Moved over to the window, and it was terrible. Then I had a bright idea. I saw a big brass plate. We got it down, and we placed it in sunlight, and we directed the reflection from it into her eyes. Incredible picture--the luminous quality that appeared in the eyes. That's one of the best things I've done for a long time.

Teiser: We saw the photograph you'd done of Sandor Salgo?

Adams: Yes, that was nice. Made at Point Lobos, with the rock behind him in a gray, silvery light. Yes, that was pretty good.

Teiser: That was quite recent?

Adams: Very recent. Yes, just this year.

Teiser: You still enjoy darkroom work and find it challenging?

Adams: Oh yes, I love darkroom work. And I have a great program ahead for it.

[End Tape 19, Side 2]

*Helmar Lerski.

Adams: Reproduction Rights

[Begin Tape 20, Side 1]

Teiser: When you make portraits or other pictures on commission, what do you do with those negatives? Do you feel free to use them again?

Adams: Well, the portraits--I do relatively few of them. Each one is a special case. For instance, the one of Salgo I did was a donation to the Carmel Bach Festival. Of course, he's a pretty sharp Hungarian. He'd like to get a dozen prints, but he has to pay for those prints if he's going to get them!

But the point is that what you usually do--you charge for a sitting, and if nothing comes out, you have another sitting. If it's your fault, you don't charge for that. Then you charge so much a print. And then you keep the negative, but you can't use it without permission.

Teiser: So if you wanted to use it in an exhibit, for instance?

Adams: I would ask, "Can I use your portrait in an exhibit?" He could agree or refuse. Fortunately he said, "Sure, fine."

Most people would not object, but people are funny, and of course the portrait is a complicated personal thing. The negative belongs to me unless it's especially controlled in the agreement. It is the same in advertising too. The ASMP is trying to get the one-use clause, where you do a picture for one use only. Then if they want another use, you charge again. Sometimes that's rather difficult. The Paul Masson people have been wonderful to work with. I've done a lot of pictures, and I don't care how many times they use them. I was paid quite well for making the original pictures, and you're always paid for making the prints. But to charge them a minimum fee every time it appears in an industry journal or advertisement would be excessive. Of course, a lot of the photographers have been really walked on. The good photographers never seem to have too much trouble. But the poor ones are "done in" time and again.

Teiser: Well, once somebody makes a glossy 8 by 10, it can appear and appear and appear, and you'll never know.

Adams: Yes, unless you say reproduction restricted. But even then you can't be positive. You say it is copyrighted. Is it really copyrighted? That's the trouble. You have to prove that somebody else wasn't there and did the same thing at the same time. It's very difficult. But we had a case, though, in which I gave a deposition on principle. A photographer named Wright in San

Adams: Francisco did a picture of the Golden Gate at sunset. It was a very corny picture, but he sold hundreds of dollars worth of it. He had everything in it, including a seagull, I think. He'd done work for the Boat Show, and the man who'd managed it said, "Oh, I'd just love a print of that." He said, "Well, you've given me a lot of work. I'll give you a print for \$25." And he put on the back of the print, "Reproduction rights reserved. Must not be used without permission of the photographer."

One day he's driving into town and he sees this picture on a billboard, and he also gets a brochure with the picture on it. And the brochure came with a letterhead with the picture on it. So he calls up this man and said, "Now look, I gave you that picture for display in your office." The man said, "Well, I own it. I guess I can do what I want with it." So the photographer sued him for \$10,000. The lawyers came down to see me, and we took a deposition--on ethics. All I could say was that in reviewing the facts of the case, this man's photograph, of which he sold quite a number, has now been ruined for sale because it's become commonplace. He gave no permission whatsoever for reproduction. He gave this print to this man for a very low figure, \$25, for his personal enjoyment, the cost including the frame, I think. And as a picture to hang in his office. Otherwise he naturally would have expected and deserved an appropriate reproduction right fee.

But this man, without any word to him whatsoever, used this picture in several important commercial directions. And therefore, I must say that ethically the photographer deserved punitive damages.

He was awarded \$5000. He knew he wouldn't get the ten. We didn't realize it, but it was a legal photographic landmark. It was the first time that anything like that had really happened in local law. For a photograph that was not a news event--the burning of the Graf Zeppelin or the shooting of Mayor Gainer of New York, or an assassination, etc., these are events, are pictures which could not be duplicated as events and would be safer in copyright.

You could take many pictures of the Golden Gate Bridge, but the judge said, "This is a unique picture." The award of \$5000 I thought was very fair adjustment. The defendant actually misused this photograph for his personal advantage.

Teiser: When you make photographs for reproduction, do you ask for the return of the original? So that it won't be reproduced again?

Adams: In the first place, there's a reproduction fee, and for small outfits and educational things I just say, "As much as your budget will stand," and I often get more than I would ever have the nerve to bill them for. People are very good about it. Because it might be some

Adams: little college somewhere, and they send me \$25. Somebody else sends \$250, and an advertising picture is \$500 to \$1000. But it's for one use only. I request they send the print back carefully packed. Now if the print comes back damaged, there is an extra fee of \$25 for just the physical damage requiring additional darkroom work. I'm raising it to \$50, because you have to go in the darkroom and set up, and some of these prints you make for reproduction are sometimes more complicated than your fine print because you've got to balance the values for the engraver.

I remember the Ladies' Home Journal wanted a picture, and I wrote to them and said please return and pack most carefully and gave them this notice. It came back with one flimsy piece of cardboard, and it was ruined. So I just wrapped the whole thing up, same wrapping, same print, the letter in it, showing this was the way it was received, signed and witnessed to the effect that I'd await a letter of apology and a check. Fortunately, I got both! The way people treat things is terrible.

I remember getting twenty-four 11 by 14 pictures back from U.S. Camera. They were really very good reproduction prints. They packed them in two sheets of 8 by 10 cardboard in an ordinary envelope. You can imagine what they looked like. But, you see, people don't care. They think, "Oh, a photograph. Just press a button and there's another one."

Teiser: What do you do if you don't get one back?

Adams: Well, we write them. Usually they are returned. I'm not a commercial photographer, so I don't have that problem too much.

Teiser: But I know you must have requests for reproduction prints very, very often.

Adams: Oh yes. They're not too much trouble. I really can't complain.

One tragic thing I recall. There was a big show at the Museum of Modern Art of European work. The Europeans were noted for their perfectly lousy print quality. They were only interested in reproduction potentials. These photographs (glossy prints) by leading German and Austrian and Italian photographers come in. And the registrar thought they were just proofs of what was coming, so she wrote the number in red felt pen on the face of the prints. Willard Van Dyke was working with them one day, and he came across this red crimson inking. He said, "We did everything we could chemically to save them. Our registrar is so used to receiving a glossy print of a painting or a sculpture, and of them as record prints, and she writes the accession number on it." These were such lousy prints they thought they were copies instead of the original photographs! [Laughter] All kinds of things happen in the museum world.

More Books

Teiser: The next book I have here that you and Mrs. Newhall did was the Death Valley. I see that it's gone through at least four editions now.

Adams: That was first an article for Arizona Highways. Arizona Highways let us use the color plates, which were printed in Milwaukee, and we had the insert put in the expanded book. Well, it was pretty sad color. Some of it was all right; the "other side of the sheet," as they say, was terrible. But it is a monumentally good article on Death Valley.

Then, Edwin Corle did a book on Death Valley with the Ward Ritchie people, and many of those black and white pictures were used.

Well, remind me to find you a copy of the Death Valley. It's one of the things that I'm very much ashamed of in the sense that for expediency (the idea we have to get the book out in a rush) we haven't adhered to the superior quality that, as an artist, I should have strived for. Then the book wouldn't have appeared at all! There's nothing undignified about the book, but it just doesn't do the photographs justice. And a lot of the photographs are also there on an informative basis, which is something you have to think about in publishing. When you do a book, say, for instance, Cartier-Bresson's Decisive Moment--which was a highly selected collection of more than twenty years' creative work--it makes a big splash. Then he's commissioned to do a book on Russia or on China, and of course he finds he can't possibly do in one year what he did in twenty. You can make more photographs, but the high intensity and quality would be difficult to achieve.

So I could do a book like the Sierra Nevada (the "white elephant") which was a result of quite a few years' photographing in the Sierra, and we could do another book right away or within a year, but it would not be of equal intensity.

Teiser: The Death Valley book must go on and on selling.

Adams: Well, people buy it. But everything is coming out in new forms. There's a whole raft of new color photographers--David Muench is doing beautiful stuff. It's time something new is done, instead of keeping it in an embalmed state. [Laughter]

A very strange thing is happening. Books are coming out which are perfectly beautiful pictures of nature--detail, rocks, roots, trees, flowers, moonrise pictures, and so on--and most photographers are repeating themselves. This little book that came out, It's Just a Little Planet, has some pictures that are perfectly charming. But

Adams: you finally say, "So what." I mean, this book is directed to dogmatic conservation, and not all the images are fine. People begin to take everything for granted--"Oh gosh, another color picture book!" It might be perfectly beautiful color images in some cases, but it gets to the point where it can be deadly boring. I think we have to have something like This is the American Earth again to revolutionize the concepts.

Teiser: Well, again, that's a hard act to follow.

Adams: Yes, it would have to be something different. Now, whether the medium must be photography is a question--because most of the documentary photography is just terribly bad. Now, I've seen in my "eye" about twenty-five pictures of both of you ladies, right now, all snapshots and perhaps interesting caricatures of you. But there wasn't one worth doing. However, her face right now, with this reflected light on it, is quite beautiful. I think I could really do something with it. But I just wouldn't go "click;" that is the point. Now you have "click, click, click--garbage, click; people, click; freeways, click." [Laughter] Gosh, even the surface of Mars, click.

Well, there are other art forms. Polaroid gives you something new--it's a very interesting development. Polaroid, if used properly, and with the "immediate" subject, gives a feedback that we don't have with conventional work. The Polaroid 4 by 5 material is simply spectacular in what it can do. But Dr. Land and I have kind of a fundamental but kindly disagreement. He claims that everybody could be an artist if they had the medium to make it possible, and I say everybody can be an artist in any medium if they're an artist to begin with. It's really complicated. But he's a great humanist. And he has an idea of the diary approach: the recording of the human scene. When you back into painting you see that Daumier's work is terribly important as a record of his times, but I've never been very excited about the images as such. But many people are, to a tremendous degree. I am being perfectly honest in saying most old masters bore me to tears. I've seen a surfeit of annunciations and crucifixions, and it's the same story. It's almost like the Soviet demand that art reflect the Marxian doctrine.

I had a wonderful example with that fossil from Utah, which I think is one of the most beautiful objects I've ever seen. It's a fossil shell in a section of a round geoid, and the seller wanted to cut the rock base off because he thought it was "in the way." It's a perfectly beautiful design. I had it on the table at Yosemite. Two very well known artists from San Francisco, whom I will not embarrass by including their names in this story, came and

Adams: their eyes practically fell out of their sockets. "Who in the world did that? It's absolutely incredible!" I said, "I've no idea; it's fifty-five million years old." Immediately they lost interest. [Laughter] You see, they looked at it as something sculptured or formed, but it was just a shape of nature. Gerry Sharpe did a beautiful picture of it which was on the cover of Science magazine. It was done with Polaroid 4 by 5 film and was a perfectly beautiful photograph.

Teiser: You did a book on Yosemite Valley with Mrs. Newhall titled Yosemite Valley.

Adams: Yes. Nancy edited the book. I did the text, whatever small writing that was in it. It was published by 5 Associates who produced Death Valley, Mission San Xavier del Bac, and The Tetons and the Yellowstone as well. But I'd like to do a new book, really sum up the Yosemite Valley, which would be very different from anything I have done before.

Teiser: Do you enjoy writing?

Adams: Yes, I enjoy it very much. I have a hard time with quasi-technical books because you have one person saying it's too complex and another person saying it's too simple. And, as Dick McGraw said, "I can't possibly understand it." Well, he didn't read it slowly and carefully; those books could have been padded out to four times their length just by using "simple" language. I just now got a chapter on photographic chemistry for Book Two of the projected Basic Photo series revision. I'm not a chemist, and I asked a man who's a very good chemist to do it. But the writing is simply atrocious! I've got to cut it down to at least one-half. I don't know if I can do it; it's just a terrible job. Everything he says is right, but he says it in a way that is almost incomprehensible (I'm accused of the same thing!). I've done several things that I'm happy about. I gave the Chubb Fellowship talk at Yale and another at Occidental College. I'm inclined to be a little florid, maybe a little didactic in tone. I don't have quite the style of the professional writer. I certainly don't have Nancy's peculiar, highly "decorative" and emotional writing style. I find if I dictate, it's terrible. I have to pound it out rapidly on the typewriter with all my arthritic errors. It's a race between me and the IBM for speed, and the IBM wins. [Laughter] And then I have it cut down and polish it.

Charlotte Mauk was a very good editor. I just remembered something of interest. I was writing for the Yosemite and the Sierra Nevada about the quality of the pre-dawn light. [She asked:]

"What do you mean, pre-dawn light? Dawn is the first light. How can you have pre-dawn light?"

Adams: "My gosh, you're right." I think in Science magazine--or some other very good magazine--somebody has written about the qualities of pre-dawn light. "Up and about in the beautiful quality of the pre-dawn light." You feel what they mean, but when you think logically about it, it's impossible, because dawn is the first light, and what's pre-first?

Government-Sponsored Exhibits

Teiser: There were two exhibits for the USIS in 1957--one "I Hear America Singing" and one "A Nation of Nations."

Adams: Yes, the "Nation of Nations" was done for the Kongresshalle in Berlin, an exhibit designed by Herbert Bayer. "I Hear America Singing" was the one that toured through most of the world but was not shown in the Kongresshalle.

Teiser: How did you happen to be involved in that--?

Adams: The USIS asked us to do them after the "This is the American Earth" exhibit. They thought we could do it. The Kongresshalle itself was designed by a Boston architect--he did College Five at Santa Cruz. (They called the Kongresshalle the "pregnant oyster." It's a concrete structure--very "brutalesque.") We got Herbert Bayer to do the designing, and Herbert is a wonderful man--absolutely precise. He lives in Aspen. I guess you've heard of him before. He got the Kongresshalle plans, and we found that hooks would be set in. So he designed the exhibit to hang from cables from the ceiling. He was a very meticulous man. I was to make the prints in a certain way, the panels were then to be held stable to the floor by piano wire, with little weights. The exhibit was to be a group of hanging panels--an exciting concept!

It was all designed and all laid out and shipped to Berlin. Then he found that they hadn't put any of these hanging bolts on the beams. He called me up from Germany and said, "This is crazy. I think I'll give it up and come home. They have no hanging bolts on the beams." I said, "How come?" He said, "The architect showed me the plans on which I planned the show, but there's no bolts in those beams, so I have nothing to hang the show on." "Well," I said, "Herbert, we've got to do something." "Well," he replied, "the only thing we can do is just A-frame. I don't know what else we can do."

So he worked out a plan where there were heavy weights and posts, connected with slanting panels. But it wasn't the airy effect we desired.

Adams: Then we received hundreds of negatives from all over the world, and I had to make the enlargements, and that was an awful job!

Teiser: You did all the enlargements?

Adams: I did all the enlargements. I remember making a six-foot picture from a 35-millimeter negative of a cowboy rolling a cigarette. I really resented that one. I went up through two copy negative stages. It looked horrible!

The worst job of that kind that I did was enlarging all the pictures for the Australian building in the San Francisco World's Fair. Joe Sinel designed it. One or two huge walls were just a mosaic of pictures, and the negatives all came from Australia. I thought there were bad photographers in this country, but I never in my life have seen such hideous things. Most of them were copy negatives. Joe designed them very precisely, and we worked like dogs. All I can say is I did get a good fee for it; I did my job, and I got paid for it. I made these things exactly to scale. They were all mounted, and they were delivered. And the people who were putting them up just didn't care--just trimmed them to fit! Joe Sinel went out of his mind; I had to practically hold him down or he was going to shoot somebody. I said, "We have to stop this [stop the hanging of the prints]." The contractor said, "We've got to get it done. You're not union; you have no right to be here." These pictures went up in the most haphazard awful way--after spending \$6000 and weeks of time. There was one picture eighteen feet high of a waterfall; all I had was a print six inches high to work from. I had to make a copy negative on 8 by 10, and then make big blowups of that in six sections and have them mounted to fit together.

Teiser: Did you work on other things with Joe Sinel?

Adams: Oh yes, he designed the Death Valley book. We had a little argument with dear old Joe over the cover. There was a type known as "bones." Now, Joe Sinel was a very fine designer, but once in a while he had his lapses. So he got this type for the Death Valley cover made up of what we call "bone type," in which every letter is formed in bones. It's one of these incredible period types. The "Gs" were curved bones--bones with nuckles at each end, something like that. And we couldn't take it, and he was very mad at me for a while. So finally we used "ghost" type--we compromised--which is not bad. I mean, the name is bad, but the type is pretty effective.

Teiser: Did you have many of your photographs in "Nation of Nations"?

Adams: Yes, maybe a fifth of them were mine.

Teiser: What was it, a representation of America as it is today?

Adams: Yes, all the races--the Amish and Jewish ghettos, and the Irish and the Chinese and the Japanese and the Mexican.

Teiser: And what was the exhibit "I Hear America Singing"?

Adams: Well, that was something of the same but not racially oriented. It was nationally oriented to the United States and distributed overseas.

Teiser: Did you print all that too?

Adams: Yes, I printed all that too. I think, instead of figuring the miles I've driven, I should have figured out the acres of photographic paper I've used. Like, sixty rolls of fifty-foot paper for one show--forty inches wide by fifty feet long!

Teiser: Do you enjoy working on exhibits like that?

Adams: I did, but if it isn't your own work it becomes a different challenge. Sometimes we got some beautiful negatives from which I could make a nice print. The thing that shocked me was that many negatives we got from well-known photographers were so bad that I could only say, "Well, I can't understand it!"

Teiser: I'm surprised they sent bad negatives, without being embarrassed.

Adams: They thought they were good. I hate to say it, but most of the photographers know very little about photography! They just know about situations, images, events. Their only response to that comment is to say that I'm just too precious, and the world I represent has no human meaning.

Cartier-Bresson says, "Look, the whole world is going to pieces, and all Ansel Adams photographs is rocks." He said that twenty-five years ago, and the world hasn't gone to pieces yet and the rocks are still there. [Laughter]

For some reason or other I'm intellectually weary with cataloguing. I mean, that kind of stuff is hard on my mind. I'm enjoying this, but looking at negatives and trying to figure out what they are and when they were made, and then typing that data on envelopes and making a catalogue list in duplicate--is it San Ildefonso Pueblo or is it Domingo? I often have to put a question mark, because I don't know.

Some young girl out at Radcliffe is going to get a grant to figure out the historic element in my negatives. And I feel very sorry for her. [Laughs] It's going to be a terrible job.

Teiser: Are you going to let her at them?

Adams: I don't know what we're going to do.

Photography Critics

Teiser: I just read a statement by Minor White in Aperture, a kind of editorial in reply to a statement by Marjorie Mann. He wrote that maybe the only thing left for human sanity is to photograph rocks and beautiful details of nature. He was writing the opposite of what Cartier-Bresson said.

Adams: It was a good statement. Well, Marjorie Mann is a problem because she writes very brilliantly in a quite sterile way. She has a slight paranoia, and I never could figure out why she got into photography. I had lunch with her once at UC Davis. She was doing a lot of writing and taking everything to pieces in a very aggressive manner. I said, "What is your real interest in all this?" She said, "Photography's all wrong, and I'm going to set it right." I said, "Well, that's a very large order. I wish you luck, but--"

So I had a special feeling about her; she made no effort to find out what the Friends of Photography here was really about, and came to the first show and another show too, and found that both were reasonably conservative. We'd been using Edward Weston, Brett, and people around here, and people who were photographing nature in a rather superior craftsmanship way. And so she said we're just old fogies, and we're perpetuating death, and we're living in the past. She paid no attention to the number of advanced and avant-garde shows that we've had. Fred Parker had read her [before he came to Carmel], and he had the same feeling about the Friends, because the woman seems to have some power of conviction. I think she writes very glibly. When he looked at the list of what we'd shown, he simply said, "I'm wrong. This list gives me a totally different opinion."

That brings up the whole question of the photographic critic. When Beaumont Newhall was sent out by Popular Photography or Modern Photography or one of those trade magazines to cover my big show that Nancy did, they said, "Thank you, this is fine, but for God's sake, can't you find anything wrong with it?" And Beaumont tried to point out that criticism wasn't just trying to find what's wrong.

A lot of these terrible photographic critics in these even worse magazines, which we are surfeited with these days, are in the main always trying to find something wrong. And the reason for that perhaps is that it makes the reader feel superior if he can read an account of an exhibit by a well-known name that takes it to pieces; it makes him feel pretty good. It is not scholarly criticism. I say it's human. I can understand the reaction. It's been a little better lately.

Adams: But exactly what is the function of criticism? Criticism isn't just taking things apart. It really is evaluating art in the light of certain historic aesthetic and craft standards.

Teiser: There's a woman named Margaret Weiss who's written--

Adams: Weiss. Now, she's very good. She's not too strong, but she's more sympathetic. She tries to get to the essence of what the photographer's saying.

Teiser: I know she's written articles about your work over the years.

Adams: I don't think she's been objective enough sometimes, but she has a certain human quality. Marjorie Mann is just out there "gladiating." Photography is the virgin tied to the stake and she is the lion. [Laughter]

Teiser: I've wanted to ask you about the 5 Associates, and the history of that publishing enterprise.

Adams: Well, that's very simple. We had a young man with us named Phil Knight. (He's dead now.) He was a good photographer and he had good ideas. He was trying to help out Best's Studio, and we thought if we could publish postcards of Yosemite, we could put out some pretty superior cards. But of course we'd have to be able to sell them outside the park. We couldn't possibly publish postcards and sell enough in our own place. And the Park Service at that time refused because they didn't want any concessioner to be involved with any outside effort. We could have fought it, but we didn't have the means or the energy at that time to do it. So we set up this little corporation known as 5 Associates, which was Phil, Virginia--it's like fifty-seven varieties—you could have fifty or a hundred of them. The name was just 5 Associates, Inc. We published cards and booklets and we could sell them to Best's Studio. We had trouble with the National Park Service because they thought that was a subterfuge!

Well, 5 Associates was a very difficult thing to manage.

Teiser: Your daughter, Anne, has been--

Adams: Yes, she's been running it. We have to make up our minds soon whether to let it die or do something expansive about it.

Teiser: The first book that I found that it did was Bracebridge Dinner in 1963.

Adams: Oh yes, that was just a little pamphlet that the Yosemite company guaranteed to buy.

Teiser: You had written it?

Adams: Jeannette Dyer Spencer did the foreword, because she was the one that had all the intellectual concepts of the Bracebridge, and her daughter Fran did the sketches, and the text was by me. The whole thing was designed together with drawings and type. It was a rather interesting thing.

Teiser: Is that still in print?

Adams: Slightly. We're now worrying about whether we should print it again. Of course, the company won't buy enough to cover the costs, and what do we do, we only sell a handful at our place.

Teiser: There's a copy of it in The Bancroft Library.

Adams: Oh yes. It's a nice little thing--beautifully done.

Honors and the Hawaii Books

Teiser: In 1958, your third Guggenheim Fellowship. What was that project?

Adams: That was primarily to print negatives--try to catch up with the printing. And the outcome of that was the big '63 show. But the fellowship enabled me to print negatives and do the show, which cost a very considerable amount of money--big screens and panel pictures were used. My stipend from the Guggenheim paid for part of that big exhibit, which then toured the country and was broken down into halves and then into quarters. It's still floating around somewhere--some of it.

Teiser: In '58 the Rochester Institute of Technology gave you the Brehm Memorial Award--

Adams: Well, that was in honor of somebody who gave something to RIT. It's considered rather prestigious in the field.

Teiser: For your general work?

Adams: For my general interest in photography. You see, the Rochester Institute is a great place, and it is primarily devoted to technical photography--the photography department is directed to photo-science and advanced techniques in color, etc. It is not too creative. Minor was teaching there for a while, but he didn't get as far as he'd like. Now he's at MIT in the department of architecture, and he's putting the icing on that intellectual cake with great success. Somebody said to Minor, "You're putting the spiritual icing on the intellectual cake." [Laughter]

- Teiser: The year before the publication of The Islands of Hawaii you had an exhibit at the University of Hawaii. Was that of your Hawaiian pictures?
- Adams: No, general work.
- Teiser: Was it a big show?
- Adams: Pretty big, yes.
- Teiser: Was that during the time you were working in Hawaii to take pictures for the book?
- Adams: Yes.
- Teiser: How long did you have to stay in Hawaii?
- Adams: I was over there five times. I can't stay in a place longer than a few weeks when I'm working. I have to "pogo stick"--do a number of pictures and come home and develop and print them.
- Teiser: You have a large collection of negatives from that one?
- Adams: Oh yes, some very good ones. I've been over all the Islands. Probably know more about the Islands than most Hawaiians--I don't mean "know more," but I've seen more.
- Teiser: Did you fly?
- Adams: Oh yes, we flew all over the place.
- Teiser: Did you do much aerial photography there?
- Adams: None. No, my only aerial photography has been in very small planes around here. And for the Fiat Lux there's one of the Los Angeles freeways and of the Sacramento Valley rice fields. I'm very happy about those. But that's a special branch of photography. There's so many things against it for fine image quality that it's almost unbelievable.
- Teiser: The book, The Islands of Hawaii--had the Bishop National Bank seen the book you did for the American Trust Company?
- Adams: Yes, that's what stimulated them--this book, The Pageant of History in Northern California, stimulated them to do their book. Then 5 Associates did an Introduction to Hawaii, the bank gave permission to use the photographs I had made, and Joesting again did the text.
- Teiser: Was that satisfactory enough to you?

Adams: Yes, that was all right. The bank book was designed by Herbert Bayer. It was a horizontal book. The Introduction to Hawaii was a vertical book.

Teiser: Was that more to your liking?

Adams: Oh well, it was a book for sale. The other book was for free distribution by the bank. It covered a lot of things that we never would put in a book for sale.

Teiser: Do you hold the negatives to the Hawaiian book?

Adams: Yes. I never use them in advertising without permission. I'm allowed to use them in exhibits. I never would give them out for any competitive use; that's more or less a natural, ethical agreement. Most photographers follow it. There have been some bad cases of "jumping the gun," as we call it. It hasn't done any good for the reputation of the medium. But, as a rule, I think most photographers are pretty ethical people.

[End Tape 20, Side 1]

Photographing Wineries and Vineyards

[Interview XVII -- 9 July 1972]

[Begin Tape 20, Side 2]

Teiser: Would you discuss your Masson winery pictures?

Adams: Oh yes. Well, there's no direct relationship, but one of the first commercial jobs I had was a story on the Shewan-Jones winery at Lodi. I think they are still there. (I don't know who owns them.) They didn't have at that time--I don't think they have now--their own vineyards. You see, most of the wineries have to buy a great deal of grapes. Even Paul Masson, with their thousands of acres, buys hundreds of truckloads.

It seemed that the second house down in West Clay Park away from us, people were moving in one day, and I came over and introduced myself and said, "Come over and have a drink." And it was Mr. Otto and Mrs. [Sue] Meyer; he is the president of Paul Masson. We became very good and close friends. They're delightful people, and he's easily one of the top cultural leaders of the city--the Spring Opera and the Music in the Vineyards projects and many other things. He's retiring now, so we may see more of them in Carmel.

Adams: Well, then they asked us to make some photographs. I never know whether to make a suggestion, cook up a project and get them thinking about it, or just let them come to me. It very often works that way in the natural course of events--you suggest to them that you might be useful, and then things go on from there.

They wanted an exhibit. I had Pirkle Jones helping me, and we did a lot of photographs that turned out very well, and I've done all kinds of work for them since. Pirkle Jones did very well.

Teiser: What kinds of things did he do particularly well?

Adams: He was more interested sometimes in people--small camera work with people. He did a very handsome photograph during construction of the new Paul Masson cellars at Saratoga that is in the Metropolitan Museum collection. It's quite a handsome heroic figure of a man wielding a big sledge hammer. It really came out very well.

Then, as I say, I've done a lot of work in the professional field. Not as much as I would like to have done. I gradually got away from the commercial aspects, the professional aspects, because it takes artificial lighting and many "controls," and that's really not my natural bent!

Teiser: You know the picture in that series that I used to just look at in wonder--technically, it seemed to me astounding! It was a very long assembly line, a bottling line. There wasn't one curve; there wasn't a shadow. It was beautifully lit; it was absolutely clear.

Adams: Yes, well, that's using natural light, what is called available light. They were new buildings. They were all lit up evenly by fluorescent lighting. Sometimes you have to do a little burning or "dodging," as we call it, for the "hot spots"--you need a little more light at this end than the other, and you balance it in printing.

The one of the vats, with the man standing on the far one, that was very difficult because it was a very long exposure. When you get in the places that are very dark, you have the reciprocity effect to contend with, and you have to double, triple, or quadruple normal exposure.

Reciprocity relates to the amount of time of exposure. That's why with Polaroid 4000 speed film--they say it's 3000, but it's 4000 for me!--you can take a picture in this room at a fraction of a second, with this light. With ordinary film the meter might say you have to go to about a second, which you might have to increase to two or three seconds. It's a very peculiar and complicated time relationship. So, working with natural lighting indoors, you really do have trouble. But that picture really wasn't so bad. That was really a relatively simple task.

Teiser: Was the series commissioned as an exhibit originally, by Mr. Meyer?

Adams: Yes, they wanted a complete series. First they used them for publicity. And they've been used in books.

Teiser: Did you take a lot more pictures than were ever used in that series?

Adams: Yes, you always do that.

Teiser: I mean subjects.

Adams: Well, mostly you take variations. I think one of the trickiest ones was the candling of the champagne bottle--a man looking at the candle through a bottle, to be exact. That was done with the available light in the room. We thought we could do it with that, and then we "bounced" a little light on his head. What's called "bounced light" is where you try to simulate the existing light by just strengthening it. We reflected an extra light on the ceiling. But, you see, we had to hold it at low value so the candle flame would be relatively strong. Too much exposure and the candle would be relatively weak. It was quite a trick to balance the light. That was far more difficult than the big one of the bottling line discussed earlier.

It's really very difficult to photograph grapes because the great big luscious bunch of table grapes you see is one thing, but the wine grapes are not that good looking. And one of the great plagues they have are starlings. There's hardly a single bunch of grapes that hasn't got pecked holes in some of them. It doesn't hurt them much for wine--only reduces volume. They would lose a very high percentage of their grapes if they didn't have the electronic distress sounds; they've recorded the distress sounds of starlings, and they play them very loud over loudspeakers. And the birds all rise up in a cloud and settle down somewhere else! Then it goes off where they land; it's a harassment of these birds. But if it weren't for that the birds would cause an extremely serious loss. They lose 10 percent anyway, I think, with all precautions. They have problems--they have virus infections. One of the beautiful things is the grape fields in autumn, with the russet color of the leaves, and it's virus--bugs (although some turn color naturally). It looks nice, and it gives nostalgic effects in pictures, but it really isn't very good for the vines.

Teiser: I think your photographs are the ones that are hanging in Mr. Meyer's offices now. As I remember, you used hill contours and shapes, stressed those larger shapes in some of them.

Adams: Well, a vineyard is nothing but a really big lawn. In flat country it's more difficult than in hilly country. It's not too easy at Soledad. It's nice up in the old vineyard at Saratoga, up in the

Adams: hills. But Salinas is pretty flat, and of course the San Joaquin Valley is nothing but flat. So it's a matter of--oh, I don't know just how to explain it--every subject proves to have its own problems. If I did the pictures in color, I'd do it totally differently. Although there's not much color with the grapes.

Teiser: There was no color in your series?

Adams: No; we tried a few, but--it just doesn't work. It's drab. The color has to be done--well, you can stylize it--do it early and late in the day. The greens have a fairly low saturation, and the grapes aren't very colorful. There's some beautiful table grapes--muscat, for example--but the wine grape makes a pretty compact, rather ugly bunch.

Teiser: I think one of the most convincing arguments that I've ever seen for black and white as compared to color is the book This Uncommon Heritage, that the winery published using some of those pictures. Do you remember the color pictures in it?

Adams: Oh yes. And that was bad reproduction too. But it is very difficult, because there just isn't much color there to begin with.

Teiser: That exhibit of yours was circulated by the Smithsonian?

Adams: Yes. And the John Bolles Gallery had it too. "The Story of a Winery" went all around the country. We made several sets.

Teiser: Did you make sets on display boards and panels?

Adams: All done up on panels. The Atelier [Paul Frederick] did them. We mounted the pictures on cards, and those in turn were mounted on the panel, all protected for shipment in strong cases. These exhibits were fairly expensive, but when they add up their total advertising costs, they're really almost nothing. [Interruption] You were asking me about the costs of the exhibits. If you make up several exhibits at once, the unit cost, of course, goes down. But--well, I suppose sixteen panels would be a minimum of \$2500 physical cost. (If you have three or four sets, it comes to around \$2000 each.)

Teiser: How many panels were there in the exhibit?

Adams: I think there were sixteen. And when you think that one page in Playboy costs \$40,000 or \$50,000! Then, once one concern advertises like that, the competitors have to do it. So the amount of money that is spent is just unbelievable. People say, "Oh, we can't afford a thing like that," and they don't realize that moneywise it's very small. But in relation to the number of people that see

Adams: it, then its impact is more apparent. I think it's a fine way to advertise, but it does involve a lot of work. Of course, the professional tries to figure out all the ways he can of making the photographs useful to the client, so that the original expenditure is amortized, which is a kind of professional responsibility.

Teiser: U.S. Camera annual, I think, ran a whole section of photographs from it, and then there was a pamphlet made up with Elsa Gidlow's text.

Adams: Yes, these were a pretty good job; they used the pictures pretty well.

That's the only big winery I've had anything to do with, except I did do some pictures in the Napa Valley for the American Trust Company when I did their book. But I actually haven't done many professional assignments as such. I usually like to work on a project basis and be able to put some thought into it. Ordinary professional life is kind of a rat race because--it's something like a clinic--you don't know what's going to happen next. Everything from an earache to appendicitis. [Laughter]

Teiser: In This Uncommon Heritage the black and whites weren't so bad.

Adams: Yes. But it didn't move me very much. You see, wine is really a "mystique." There's nothing in the world that gets me down more than the so-called wine snob who really drinks the label. Some of our California wines are absolutely delicious, and some of Paul Masson's I think are as good as any there are. Emerald Dry is my favorite. The rest of them are sweetish, to my taste. Oh, then there's an interesting thing--they have a brand called Baroque. Before it was released I brought a bottle down one time and tried it. They said, "Test it and see how you like it." It was very good. They said, "What are we going to name it?" They wanted to call it Renaissance. I said, "Ah, it's too long a name--a bit affected. Why not call it Baroque?" My gosh, they did! I don't know whether I can take the credit for it, or whether that was just a coincidence. But it is a much simpler name than Renaissance.

Teiser: This makes a good label.

Adams: But the danger is of course in people just assuming that a new wine is an easy matter to make--you just mix a few things together, etc. There're all kinds of technical problems. It's something terrific. Now they have estate-bottled wine, which is highest quality wine. We don't have vintage wines here because every year is the same. You can't say that 1967 is better than '68, although the European weather changes more than ours. But with the most careful controls, there will always be slight variations. It's interesting to see the huge trucks of grapes coming in. The laboratory is on a raised

Adams: platform, and they take handfuls of grapes and put them through a special machine, and they're analyzed right on the spot for the acid and sugar content, etc.

Looking down from the ramp in the [Masson] cellars on four or five million stacked bottles of champagne--it's hard to believe it, but there they are, a huge number. And of course there is a way now, I think, of making champagne without having to put it in the original bottle, because they just stand in these bottles a period of time, and then the neck contents is frozen and discarded, and it's dumped, filtered, and rebottled. It always seems a waste, but that's the only way they've been able to do it, because when it's standing in bulk, it changes character. Wine chemistry is extremely difficult.

Teiser: Almost as difficult as photographic chemistry, I think.

Adams: Of course, in the old days they would walk around in their bare feet and squeeze out the juice and pour it into a vat that perhaps hadn't been properly cleaned. They never knew what bacteria would grow in the acids and give these wines very distinctive flavors or produce a failure. I think they were reasonably safe--but now the wine is transferred to the stainless steel and glass tanks and remains "static" in quality. Romantic people say that the thought of using a stainless steel vat for wine is sacrilege; it's like putting holy water in a plastic flower bowl. They've got these romantic ideas still! [Laughter] But you never could clean out a wooden cask as well as you can a steel one.

Pirkle Jones and Ruth-Marion Baruch

Teiser: Pirkle Jones was working as your assistant at the time you were doing that series?

Adams: No, no. But he and I were working together on numerous occasions. I gave him lots of jobs that would come my way that I didn't want to do, and he needed them. So I'd refer them to him. I still do that right now. He's an excellent photographer. We just decided we'd do this Masson together.

Teiser: Was he at any time working as your assistant?

Adams: He did at the school [California School of Fine Arts]. Well, I think once in a while he went off on some trips as an assistant, yes. He didn't really "join up;" he was always pretty independent.

Teiser: He and his wife, Ruth-Marion Baruch, are unusual, aren't they, in that they both photograph?

Adams: Yes, both very differently. They're quite a couple. She's very good--she's got a certain European approach. She's apparently very quiet and indrawn, and yet her photographs have great force.

Teiser: I recall the Haight Street series--or did he do the Haight Street?

Adams: She did the Haight Street series. I think he did a little with her too. She did the flower people and she did the woman shopper--a series of such themes in San Francisco.

Teiser: And I guess the Black Panthers--

Adams: Were done together. I think they really got caught on that one, went head over heels with it. They did a perfectly excellent job, but of course it's not the true story--I mean, the full story. This was just the icing. I never could quite get them to explain or justify--a bunch of the Panthers going up to the state capital with rifles. It didn't seem to be exactly in line with democratic sweetness and light. They were, in a sense, hypnotized with that, and it got beyond them. Not that they didn't have a perfect right to do it, but I think it was hardly balanced. It wasn't any more balanced than my book on Manzanar could cover the whole relocation situation--both had a specific slant on the situations.

Teiser: Well, if you don't have a slant, what can you do?

Adams: That is a very good question. Whether it's complete enough, a book is a kind of serious thing. I hoped that the text of the Manzanar book defined the "slant," but apparently it didn't to a lot of people.

They did a story on--a town up the Bay--Walnut Grove. It was a very nice story. And Marjorie Mann praised it. Then she went up and saw that all they had done was the ramshackle, beaten down, old part of town. And the whole town as such was very different, prosperous and modern. So then Marjorie "unpraised" them. [Laughter] It was only one aspect of the subject. This would be like taking San Francisco and doing it in the worst part of Chinatown and in some of the black ghettos and calling it "San Francisco." Of course, people do that. The reason for it is very strange. Sometimes there's a reason to be helpful, but there's some kind of an ego that just enjoys protest. These people take an awful lot out on the world in their photography; it's not exactly balanced.

Adams: It's very interesting that when these so-called journalists, the documentary types, do that, they stress the unfortunate levels, which Lord knows need to be revealed--I'm not begrudging it. But whenever they get into the middle class or upper levels, they approach them satirically, always make clowns out of them. If somebody's coming out of the opera well dressed, that person becomes a clown. Whereas the poor downtrodden spectator in old shoes and a hat, there's something noble about him, you see. [Laughter] It's a sort of identification. And that was expressed very strongly in a group called the Concerned Photographers. I'm a concerned photographer, but I'm concerned about many and different things. But to them, there wasn't anything else to be concerned with except the New York ghetto and the poverty--almost to the point of nausea. It's bad enough, but it just isn't the full picture.

I never got such a surprise in my life as when I went to Watts to photograph for the Fiat Lux book to show students doing tutorial work. I expected to find Watts a real run-down slum town, but it's a rather attractive little suburban area--the houses, most of them were separated and with their gardens, and they were pretty clean and neat. Compared to the ghettos of Washington and Detroit and New York or San Francisco--my goodness, this place was most agreeable. It looked like any other part of most of Los Angeles. And of course the trouble came not from the way it looked but the fact that there were no jobs. But we went into quite a few houses, and everything seemed to be very well kept. It was obvious they were quite poor. I mean, there weren't any signs of affluence, but it certainly wasn't that filthy horrible thing that you usually see--

Teiser: How did you happen to be there?

Adams: Well, part of the University work. One of their big projects is the tutorial. Students--I guess fairly advanced students--would go out and teach problem kids or kids who are ill or underprivileged; I don't know just what department it's under. The Sherman Indian School at Riverside had a lot of tutorial people there. And the Chicano group from Berkeley, I remember, went to Golden Gate Park with a couple of young teachers who took about fifteen or twenty kids along for the day. They took them to the Academy of Sciences and they took them to the museum. It was a very good thing to do, because the parents were working. I followed them around with a camera. It was a refreshing experience!

"Images and Words" Workshops

Teiser: We were talking yesterday, I think, about the Yosemite book. I was reading it this morning, your text, and it brought up the relationship of words and pictures, and complementary factors in words and photographs.

Adams: Well, there was an attempt to create a relationship. Of course, the Yosemite book is more or less limited because it relates to just one subject. A book like This is the American Earth is of far greater scope.

Teiser: The workshops at Santa Cruz, "Images and Words," how did they originate? There were about four or five successive years?

Adams: Four. We talked with Dr. [Carl] Tjerandson, who's the dean of the extension division at UCSC [the University of California at Santa Cruz], in regard to possible workshops. Knowing how interested the Newhalls had been (they had gone to several places in New York and given workshops along this line), I contacted them about it. They thought it would be an ideal thing to do a workshop where you'd pick a theme and the students would have to do research and exploration and the photography and writing and put it all together. Then the typographic designer, Adrian Wilson, would come and show them how such books are done. Nancy was very helpful for sequences. Beaumont would give them an excellent idea of the mechanics. And Pirkle Jones and I tended to the photography. It was rather amazing. The Project FIND, which was an OEO [Office of Economic Opportunity] project related to the--what does that mean, FIND? [Friendless, Isolated, Needy, Disabled] Our subjects were especially the elderly people, and it didn't make any difference whether they were rich or poor, they just had nothing to do. It was a social problem, different from that of the underprivileged.

So the people in the OEO group took us around for a couple of days and we met many people. Then the students teamed up in groups and would go to these people in certain areas. We did a great deal of work with the Polaroid process, and then we would review the prints and find out that certain categories were incomplete, etc. We'd dash out and finish those, and then start putting the book together and making photostats--enlarged copies for the dummy. It was quite an exhausting thing, but it really came out very well.

Then we did the one on the Stevenson house in Monterey, but all the negatives were lost. That was a great tragedy because that would have been a nice book.

Teiser: What happened?

Adams: The negatives just disappeared. We had photostats made of all of them, and I guess the negatives just got lost. I think we could have put a pretty good book together on this subject.

Then we went to Yosemite and we were going to do an historic book--the old Yosemite and the new, the scenic and the human. But the people got so taken with the new aspect of Yosemite, with the youth and all the climbing and outdoor excitements, that they went over to that aspect of the valley. It was quite a good interpretation. It got a bit out of hand; it was a difficult job, it was too complicated. I was relieved not to continue these workshops.

Teiser: How many students had you in those workshops?

Adams: Oh, we had about forty to forty-eight.

Teiser: Adrian Wilson told me that you were inexhaustible in handling it, that you kept people going.

Adams: It finally got so I couldn't keep myself going after awhile. We just can't do too much when we are interested!

Teiser: He was telling me how well you'd organize groups of people, and I realized then that you'd had experience as an organizer of group activities going back into your very early years.

Adams: Yes, although nothing's ever the same. You have to play it by ear every time.

Teiser: Were they the same kind of students who'd come to your other workshops?

Adams: No, most of them were university people, college people--people interested in writing, editing, journalistic reportage, social problems. There was a difference.

Teiser: Were some of them just interested in writing and not photographing?

Adams: Some. Some were interested just in photographing, some were interested just in the technique of putting books together. You see, people are waking up to the fact that book design is terribly important and that all kinds of things happen to help the flow of the eye and the flow of ideas. And then one of the great problems that the average person doesn't realize is the necessity of writing to space. When you notice Time magazine, or Newsweek, they're marvelous examples of filling available space; there's never a line short, and the text is written and edited with that end in view. You usually overwrite and then you have to cut; and if you underwrite

Adams: and have to expand, it's not quite so easy, because then you have to pad it a little. But the size of the picture, the size of the caption, the line length, column width, space between caption and picture--all of these things must be considered. Sometimes we can actually change pictures. If the picture isn't an important image pictorially--I mean, if it isn't a fine composition--you can "cut and crop," which sometimes helps.

I know that in my Book One [of the Basic Photo series], which I have to rewrite, I tried to fill out the captions but sometimes couldn't, so it was always based on the two-column, left-hand--the right-hand column was either the same length as the left or one line less. You never go over, whereas you do as many as you can on the right. Sometimes we'd get to twenty-one lines in all, where we could have eleven and ten lines. Then we'd look at the page and look at the text, because we had to get rid of one line. That's just "writing to space." Of course, maybe that would be the best thing that could possibly happen--to have everything reduced by one-third! Who said the best thing to do is to cut out the first and last paragraph of the preliminary text? [Laughter] But that depends on how people think. I usually think of a thing pretty much as a whole, and I have trouble reducing it all over. But some people think progressively, and they have different problems.

Teiser: Of course, some writers refuse to have their work cut.

Adams: Well, I know Paul Brooks, who's an editor of Houghton Mifflin, and it's a pretty difficult thing for him to have to tell a world-famous writer that he can't do this or that. Poetry is different. But the text writer, no matter how good he is, can very often benefit. Sometimes he thinks he's got a meaning over, and he hasn't.

Teiser: The "Images and Words" sessions must have been very good examples of that kind of give and take.

Adams: Nancy Newhall is exceptionally good at that. She'd say, "Now, you're not really saying what you mean; here you have three sentences, and you can just reduce this to four phrases with commas." And they'd learn a lot.

The Design of Printed Material

Adams: Then again, in doing a picture book of that kind, the size of the type block in relation to the size of the picture is important. You have what you call "lineups." It certainly has to line up somewhere! Or there's a "bleed," which is terrible!!

Adams: The type block within the page has a set proportion that always holds. Then you make everything work within the margin. The pagination may be at one point on the page, and the caption line may come at another. You can decide whether to have ragged right and/or left edges. If you're going to think of the right-hand page, you might have the ragged left edge of the type block. If you were thinking of the left-hand page, you might have the ragged edge on the right. That would be, I think, the conventional way of handling ragged edges, although it sometimes can be changed. But it's much trimmer if you have the type block lined up left and right. But you then have equal line length. Properly set, it reduces the number of hyphens.

It's very interesting because every type face has a different feeling to it. If you're going to have a kind of bold sans-serif type, I don't think a ragged line looks as good as it does with the serif types. You certainly might disagree with me on that.

There are people who will put together various types of different "family" relationships. Now, the Sierra Club uses Centaur, and the italic of that type is called Arrighi. These are types of the same "family." It's interesting--you can take another italic and put it with Centaur and it looks terrible.

Another thing people don't realize is that details of type design change as the point size--the size of the type--changes. If you have, say, a very delicate serif type that's very good in 8 or 10 point and you reduce it to 6 point, the serif might not be visible or hold up.

Teiser: You were mentioning a designer yesterday, Joe Sinel--have you worked with Adrian Wilson in the same manner as you worked with Sinel?

Adams: Oh yes--well, I don't think as much in my own work yet. I did a lot with Sinel. But Adrian's awfully good.

Teiser: Does he do about the same things that Sinel did?

Adams: Yes, but he's more classic in approach. Sinel is more modern and more daring. But it's very difficult in type to go too far in trick design because you can get rapidly into unreadability. There are certain modern typographers who will put paragraphs too close together and have little or no separation. That's almost impossible to read. Then there are certain types which are very difficult to read at all! I've been around type and printing for a long time. I can't say I know really much about it, but I know some of the basic factors. In fact, you should get Adrian Wilson's book, if you haven't got it, on type [The Design of Books]. It's an excellent book, really. I think it's one of the best. It will give you a good idea of the problems involved in good typographic design.

Teiser: You, of course, have been aware of all this since your first portfolio, haven't you?

Adams: Well, Albert Bender was the great "bibliomaniac," as they used to call him. I was a charter member of the Roxburghe Club. Virginia's been a member of the Book Club of California for a long time, but that's a little different. The Roxburghe Club were primarily printers, and they would do little things like Mark Twain's letters to his laundress, or house rules for the Comstock House--perfectly inconsequential matters of statement--but have them done in the most beautiful fashion by such great printers as Grabhorn, [John Henry] Nash, Johnck & Seeger, Lawton Kennedy, etc. They were great examples of fine printing--just marvelous things.

I don't know why we gave away all our Roxburghe things, but they'd be worth a small fortune now. Somebody wanted them to build up their files, and we gave them. Sometimes they'd be a little thing about this big [3 by 4 inches]--the Prayer of St. Francis, for example--and then there'd be something this big [14 by 17 inches] from The Annals of San Francisco. It might be a facsimile of a letter of one of the Spanish explorers; they'd try to get the original parchment type paper, and they'd make lithograph copies of the type and/or illustration, and they'd do a careful translation, and add several pages of very scholarly notes. They would all be beautifully done. It cost a lot of money, but wealthy people would do that for the club. Two hundred fifty copies made for the Roxburghe Club. And I guess it's all right, but I can think of much more--what should I say?--humane ways to use that money. [Laughter]

[End Tape 20, Side 2]

[Begin Tape 21, Side 1]

Scientists and Optics

Teiser: Another of your projects was with the Varians. Catherine and I were recalling last night your portrait of the two Varian brothers with--is it the Klystron tube?

Adams: Well, that's a very funny thing. That was an assignment from Life to do a series on the "mad scientists." [Laughter] Both of the Varian brothers looked rather "mad." They were amazing people, and they thought it was a great job. So I went down to see them. They asked, "What do you want us to do?"

"Well, we have to make you look mad. What kind of equipment have you got that we can use? I can see you looking through something."

Adams: "Oh," they said, "we'll fix something up."

They appear with this machine, and I take the pictures. Then I said, "What is that?"

"Oh, we don't know. One of the boys downstairs put it together. It's just a lot of wave guide scrap." [Laughter]

Well, it must have totally confounded the Russian scientists, and others! They got I don't know how many letters saying, "Dear Russ, Sure enjoyed that portrait of you and your brother. We've been sitting around racking our brains trying to figure out just what device that is. Does it do this, or does it do that, or is it part of a feed-in to a Klystron or perhaps it's restricted?" The answer was: "Nothing at all; it's just plumbing." They just put pipes together! There are undoubtedly colleagues in other parts of the world who are still wondering "what in the world" because if the Varians did it, it must be important.

Then I did Edward Ginzton [of Varian Associates] looking through an electron gun. That was quite legitimate. That was a real piece of equipment, although it would never be in that particular position.

But one of the funniest things I had happen was when I was doing a job for the Sugar Institute and went to their laboratory, and this advertising man who was with me insisted on getting dramatic effects. Here was a big chemical retort, and he wanted a girl to be up there pouring something into this. I said, "I don't think that's the way they do it. I think this is a fractionating tube. You don't pour things in the top, as far as I know." Then the head chemist came in, and oh, he blew his top! He said, "There's no reason why you can't be accurate. We'll be the laughing stock of the community." Then we had to rig up something where the girl wouldn't be pouring something into the wrong device, and yet show her full figure. [Interruption]

Teiser: Had you known the Varians before?

Adams: Oh yes, a long time before--through the Sierra Club, you see. Russ was a marvelous person. He used to arrive at parties and recite Gaelic. He was one of the really authentic geniuses--he and of course [William W.] Hansen, who worked with him on the development of the microwave; and Sigurd, who was the engineer, was the one who could put it into practical structure. But, you see, radar had no future at all unless they could step up the power. And apparently they were having serious troubles. The Klystron is a tube that "reverberates" and builds up power. The name is Greek relating to the idea of waves breaking on the beach.

- Adams: So these huge Klystrons that they used for the DEW [distant early warning] line were sixty feet high--tremendous things. The guide is a sheet of massive metal, and there's various small holes in it, and the electrons are guided in straight lines. They had a terrible time making that guide. Finally they did it by winding aluminum wire in some other very hard material and twisting it, making a cable out of it, and then annealing it, and then etching out the aluminum, then slicing it very thin. You had these very tiny and accurate hexagonal holes. Then we tried to show it by a basis of comparison with a fly's eye--the compound eye of a fly. I remember taking the picture. We borrowed an African fly from the Academy of Sciences. These were photographed on the same scale--the holes were one-quarter the size of the compound eyes--very tiny indeed. They had to be very precise, and they also had to be hexagonal for some mechanical reason. The ingenuity of some of these things I saw was unbelievable. Klystrons are used in telephone, radio, etc., now. They've got little ones this big [one inch] up to perfectly huge things sixty feet high.
- Teiser: Were you aware that all this was going on?
- Adams: Well, not for quite a while, when radar was top secret.
- Teiser: But you were, by the time you took the photographs?
- Adams: Yes. The magnetometer was another thing they did. I think that's probably one of the most important. They're used in satellites all the time. They then developed the hydrocarbon detector. The [Varian] place was highly restricted, so I didn't see most of the things until later on, after they were released. But they wouldn't mean much to me; you have to be a scientist to understand them.
- Teiser: Were you there then as a visitor?
- Adams: No, I was doing photography for them, and I had a clearance to go to certain places in the plant. I wanted to get oscilloscope patterns, so they gave me a great big oscilloscope to play with. That was fun. You can control these things and get wave forms. I was building up all kinds of weird forms--square waves and moving waves and all kinds of things. I made some pictures and people looked at them and said, "Well, it's a nice composition, but it doesn't mean anything." It would be like an electrocardiogram. The doctor looks at it, and it's nothing but a bunch of waves, but he can see discontinuities, etc. Electronic devices are terribly hard to photograph. Everything looks like a mouse's eye view of the inside of a television set. The computers are that way too. Now it's even more so with these solid state creations. Just plaques--rectangles and plaques--with intricate wiring patterns. The old computers, like the 704 I saw at Poughkeepsie, had at least the sound

- Adams: of fans cooling the power controls and the tubes. The mechanical printers were noisy. Now all is very quiet.
- Teiser: You've always had an interest in science--
- Adams: Oh yes, a profound interest in it, but there's a great difference between interest and really knowing about scientific things. They're so far from normal experience that you see them work and you say, "How wonderful." My little calculator--a cheap one--will take a square root in less than a second. Hewlett Packard have a little machine out now that's like a wallet. I think there are twelve mathematical functions built in it--very complicated, amazingly complicated thing--tangents, cosine, factors, square root, log x. Define what you mean by X as the exponent, and then write that in, and then when you press log x, you get the log x of this number. It's almost instantaneous.
- Teiser: Well, the Varians--you later did them a portfolio of prints--
- Adams: That relates to the Varian Foundation. Russell put a lot of his company interests into this foundation for conservation purposes. They acquired Castle Rock, for instance, for a state park. This portfolio was in memory of Russell Varian, with excerpts from the writing of his father, who was a poet, and Russell's own statements, which were sometimes quite poetic in themselves. They weren't pretentiously so, but they were very good. And the proceeds from that went to the Castle Rock park project.
- Teiser: What was the subject?
- Adams: Just the natural scene.
- Teiser: And things that Russell Varian himself--
- Adams: --was interested in, yes. It wasn't that "tight." It was just nature, and I had a lot of photographs at hand that I could use. Then in selecting the text excerpts, we would say, "Well, that goes with this photograph." You know, finally we built up the sequence.
- Teiser: Who got up the quotations from his father's writings?
- Adams: I did that. Well, Mrs. Varian got them together and sent me a lot of material.
- Teiser: Did you choose the excerpts from Russell Varian's writings too?
- Adams: Yes.
- Teiser: His father was a--what was the religion?

Adams: A theosophist at Halcyon. Ella Young knew them very well. They were quite a community. Quite remarkable, but very mystical. True believers.

Teiser: Sigurd too?

Adams: I don't think he was. The boys grew up there, but I don't think he--well, I don't think Russell had that conviction too strong either. It was the old people that were really concerned. I think being trained as a scientist, it would be very hard to quite accommodate yourself to some of the mystical beliefs.

Teiser: They were pretty well self-trained, weren't they actually--both of them?

Adams: Russell had a wonderful story that he couldn't read in high school. Just couldn't read out loud. He could read, and he could write, and he was brilliant at mathematics and physics. But if he were asked to read something aloud, he couldn't. He had a "block." Nevertheless, he got through high school, and then he wanted to go to Stanford. Well, in those days, you got in on recommendations, but he never could have gotten in there now. He would have been considered retarded. He was a very strange person, apparently, and would go out and spend his evenings poking around on the Stanford dump, getting pieces of wire and metal. And he made all of the historic machines--he made prototypes, duplicates that worked--of motors, and all these early mechanical and electric devices and batteries and gold leaf electroscopes, etc. He actually manufactured them himself, out of these bits and scraps from the dump!

One time Dr. [Edwin M.] McMillan, the head of the [Lawrence] Radiation Laboratory--his son was interested in photography--called up and said, "I want to get your advice. My son feels that he should go out and make all his own papers and films and chemicals. He even wants to grind his lenses. And I tell him it's all been done for him. Why doesn't he get busy and make pictures." And I said, "Well, I agree with you. I don't make my own piano if I'm a pianist."

So I mentioned that to Dr. Land, and boy, I got it! "Why," he said, "you discouraged that? That was the most wonderful thing he could have done. He would have had a real knowledge of the fundamentals of photography. What in the world got into you to say that? I'm surprised at McMillan." I was really raked over the coals. But his claim was that if he knew the actual physical basis, he'd have a better understanding of things. I still inquire how much do you have to know?

Teiser: Grinding a lens!

Adams: That's just mathematics. All lenses are segments of spheres. The tracing rays of light through materials with different refractive power, including air, with different segments of spheres and different sizes: it's a very complicated procedure.

I think he could do a good meniscus lens. He might be able to do a rapid rectilinear, but he'll have an awful job going beyond that. Now you've got what they call aspheric lenses, which can be made from plastics and cast in nonspherical shapes. It's very hard to fabricate an aspheric lens. If it can be done, of course, and it eliminates many problems of "correction." Now lens design is computerized, but it remains awfully difficult.

Teiser: Has the equipment for actually making lenses improved too?

Adams: I don't know. Say you have a company like Zeiss or Bausch & Lomb--people who are making fine lenses--and they have so many thousands to make of a certain kind. They build these big spheres, which have the correct spherical curvature, then the lenses are embedded in the sphere with pitch, and then another sphere of similar curvature rotates around them, grinding the lenses to proper shape. That way they get, oh, maybe fifty to two hundred done at the same time. But they have to be the right thickness; they have to be carefully cut and "figured." There are different kinds of glass.

Then the air--one of the problems in space photography--when you're in a vacuum you don't have air, so there's no refractive index in that area, like there is with air between the lens. Now, the question was whether to make the spaces between the glass a vacuum, which would mean refiguring the glass, or actually put air in there and seal it. Then the air would be under a certain pressure, and that might distort the glass. I think they ended up by refiguring the lenses for a vacuum. I think that's why some of the costs were so terrific. I don't know. I hear all kinds of weird tales. But underwater lenses--you know how it is when you're in a bathtub, for instance, when you open your eyes you can't accommodate your vision to it very well, to the refraction of the water. The same thing with air. If you were in an absolute vacuum, with no air touching the eyeballs, I think you probably would have some difficulty. Of course, you'd be getting all kinds of ultra-violet rays as well. It's a pretty complicated business.

As Dr. Land said, "We live in an ocean of light." Sunlight comes in this room and reflects from the rug to the ceiling, from the ceiling back to the rug, from the rug to everything in the room, etc. I asked him one time, "How, with this practically infinite mixture of wavelengths, how do you avoid canceling out? You'd think they would simply collide and interfere." That remains a problem!

Working With the Polaroid Corporation

- Teiser: Earlier we discussed your work as a consultant for the Polaroid Corporation, which I think began in 1949. Did you know Dr. Land before that?
- Adams: Oh, I met him a year or so before. He said, "I will send you a camera, and we'd like to have you try it, and make you a consultant to the firm and send you material, and you just write in your comments."
- Teiser: You weren't friends particularly before that?
- Adams: I met him through the Newhalls, actually, and we became friends very quickly; we had lots of "sympathies."
- Teiser: How did he know the Newhalls?
- Adams: That I don't know; probably through Dr. Clarence Kennedy of Smith College.
- Teiser: It's a small world.
- Adams: In retrospect, at least. You never know who you've missed. [Laughter] You just know who you hit--or who hit you!

They're the only firm that really has an interest in the aesthetics of photography. Kodak has none whatsoever. But Land's prime assistants were girls that were trained by Kennedy in the art department at Smith College. Polaroid Corporation had all kinds of Ph.D.s in physics and chemistry, and when they got stuck in the creative labs, they could call in these experts. They were trying to formulate a product that would have aesthetic image quality.

So this new development of the SX-70 camera was amazing because it was created by a relatively small group. One girl, Meröe Morse, was extremely valuable; she was interested both in technology and photographs. Then they had many imaginative people who could intuitively put things together. They had a group of chemists working on organic chemistry, a group of physicists working on the structure of the new film, and a different group working on the optics. The lens, which was designed by a man at Harvard, is a new departure.

- Teiser: The earliest Polaroid cameras had very simple lenses, had they not?
- Adams: Very simple, but very good. They did their job. When they came to the pack camera, they used triplets, I believe. (A triplet is a three-element lens.) Very fine optical quality.

- Adams: Now, my favorite lens is a five-inch, or 121 millimeter. It'll cover an 8 by 10 film on axis, wide open, providing the camera is level and the lens axis centered. That means it's covering a plate twice as wide as the focal length, without distortion. It's called the Schneider Super-Angulon. It's really quite extraordinary. It allows for many adjustments of the camera—I use it with the 4 by 5 Polaroid Type 55 P/N Land film in my view camera.
- Teiser: Do you think that as you sent back your reports to Polaroid, they made technical advances not only that they were going to make in the first place, but that also would suit certain requirements that you sent back?
- Adams: We never know. Let's see, I sent in my 2087th memo the other day. [Laughter] They relate to all kinds of things--ideas, tests, gripes if something goes wrong, etc., and those are duplicated and sent around. So we assume that if they're worth anything, they would have some effect. I think I did have a lot to do with the development of the black and white materials, and I know I persuaded them to produce the 4 by 5 material. I was incapable of designing it, but I begged them to do something for the professional. Now, whether that would have been done without my persuasion or not, we don't know.
- Teiser: Didn't your Polaroid-Land pictures appear in the first issue of Aperture in 1952?
- Adams: Yes, on the back cover. We got Polaroid to advertise on the back cover and then they used some of my pictures, and I picked out pictures by other photographers.
- Teiser: Were they the first serious Polaroid photography to be shown?
- Adams: Yes. Then they had other photographers do work for them. Now, Marie Cosindas, who came to my workshop in '63, was typical, and everything she'd try to do would be a color composition. She'd ask me to look in the camera, and I'd say, "Marie, that's a nice thing, but it's really in color. You can't separate these values in black and white. You're thinking color." She found that she was thinking color, and she went back to Cambridge and worked very seriously, then got in with Polaroid and made some spectacular pictures. So she's really helped develop Polacolor to a most extraordinary degree. She had a show in the Museum of Modern Art of these incredibly beautiful little 4 by 5 images. She's made one of the great contributions.
- Teiser: There is an article about her by Margaret Weiss [in the Saturday Review of September 24, 1966]. It indicates that she really made some kind of a great breakthrough at that workshop.

- Adams: Well, that was her own breakthrough. In other words, she decided that she was seeing in color. Now, she's a photographer that works entirely by intuition. She has a very small technical knowledge. I don't say this critically--but, by trial and error, she determined the use of various filters and developing times. She doesn't know how to use a meter. She'll make her first picture, but perhaps finds she needs a little more exposure. Finally, she gets the quality she wants. But, of course, she'll go through \$30 worth of film to get that first good print! When it's a big advertising job, the cost is minor, but for the average person the empirical approach can be expensive! I believe that you can manage in two or three exposures if you know what you're doing.
- Teiser: But still, has that encouraged professional photographers to use Polacolor?
- Adams: Polacolor has been a very great problem. It's critical; all color photography is. Because you see right away if anything's wrong; then you immediately gripe. If you wait several days to get it back from the processor, then it's too late to change it. A lot of photographers use it for testing, and that always bothers me a little, because I like to think of it being used creatively and directly. Type 52 is often used for testing; it has about the same range as color film but at much higher speed.
- Teiser: Type 52 is a black and white film?
- Adams: Yes. Edwin Land has felt from the beginning that it is easy to make garish color transfer, but to create something that has pigment quality, where the colors relate aesthetically, like a painter can relate pigments, is much more difficult. He thought it would be good for photography in general. Well, the point is, a lot of people do like the garish impact, and some of them have terrible times with Polacolor because of its subtlety. Others get very beautiful results with it. I've gotten some very handsome results. But I can see that the average color photographer takes a transparency and then has it printed, probably has a very garish photo-print made of it. Color prints can be terribly harsh, with an astringent "dye" color. As one dye lays over the other, they have to be very intense. When you're printing images in a printing press, your dots are adjacent, so you don't have a blue dot on a red dot, you have the blue dot by the red dot, and with a certain balance, you get the magenta impression. Or you get green and yellow, or yellow and blue and cyan, and you get a huge variety of color qualities. But put it this way: the dots lay on the paper more or less independent of each other. They don't hide each other as with most photographic printing processes.

- Teiser: This is an off-print of the Weiss article. The picture of the masks is not garish. It has a good deal of subtlety.
- Adams: Oh, it has very subtle colors. It's a color offset print. The photographic colors are more intense than that. One trouble they've had is to get a red that isn't too orange in hue. The new process has a much better red.
- Teiser: This print is larger than the original. Do printers mind reproducing from Polacolor?
- Adams: Sometimes! Because it's a diffusion process, Polaroid images do not have the acuteness of the normal processes, but they're improving. I think the new color has a very high order of acuteness. I think you can probably enlarge the new color three or four times without any trouble at all.
- Teiser: I don't know how much darkroom work Polaroid material has eliminated to date, but do you think it's eliminated any serious darkroom work?
- Adams: Well, I can say this: if you're very careful and you know what you're doing, you can get a perfectly beautiful print. When you get the negative, then you have to do darkroom work whether you want to or not. You have to make a print from the negative.

As far as color separations go, that's highly technical, darkroom work. You see, engravers have a darkroom too. They make their three-color separations, which are merely three black and white negatives screened for each of the three prime colors. Well, I don't know whether they would make the first set screened or not. They can just make what amounts to black and white copies with the three prime color filters to get three black and white negatives. Then they make the separation plates from these with screens. They can do it with screens to begin with if they wanted to. You know, the screen makes the dot pattern.

- Teiser: You used Polaroid black and white very seriously. Do many other photographers?
- Adams: Well, they sold nearly \$20 million worth of 4 by 5 film last year, so somebody else must take it seriously. I don't know just what the proportions of sales are. Of course, the 57 is an amazing material--it's so fast. But it has a strange structure. It varies, depending upon the negative material used.
- Teiser: So they haven't quite standardized it as Eastman has?
- Adams: They're always working on it. Type 55 P/N always had a rather soft print, and a negative that requires about twice as long an exposure for optimum effect. All the silver has to go somewhere, has to be

Adams: divided between the print and the negative. The "print only" processes such as Type 52 that develop the film and reduce the unexposed silver for transfer to the print can get out of balance. In other words, if it is a very hot day, you get a fast reduction of silver before the negative is fully developed, and you will get a soft image. On cold days the negative develops faster than the reduction of the unexposed silver, and you will get a contrasty print. Now, the actual description of what happens, I can't quite explain here; it's chemically very complex. But you can consider that the negative is developed by one ingredient in the pod, or in the film itself. Then there's another ingredient that reduces the unexposed and undeveloped silver in the form of silver ions, and they migrate through the negative, as light would go through it, attracted by the positive charge on the "receiving sheet" which becomes the print.

Now, when you get to color, you have a very complex process. The pod carries only the alkali, which is practically of maximum pH, and everything else is in the film: developer, color coupler, etc. It's an extraordinary technological achievement, especially when you have no coating required for the prints. They have had teams of people working for years on the various elements of the process. They get one thing done and that may upset something else, and they get that corrected and something else gives trouble! And then they get a perfectly beautiful material worked out and find it has no shelf life; in other words, the ingredients start to oxidize or go to pieces in a short time. If you don't have a shelf life of at least six months, you can't sell it, for obvious reasons. It's supposed to be a year, I think.

Now, Kodak will date a film a year ahead, but if you keep it in the ice box, you can use it after three or four years. It might get a little bit slower or a little bit faster--you have to test it. If it is subjected to heat and humidity, then you may be in serious trouble. Polaroid materials do not keep as well as conventional film because of chemical changes in the pod.

Teiser: Mr. Mazzeo, when we were speaking to him, mentioned that you gave talks or lectures to the Polaroid Corporation employees. Is that right?

Adams: Yes, we had classes--education groups--that would come on after the various shifts.

Teiser: What would you talk about?

Adams: Basic photography and the Zone System and aesthetics and visualization. A lot of these were people that weren't photographers, but it helped them to know a little more about what they were doing.

Adams: One of Land's ideas is to put people who show talent into special educational groups; they sit all day long doing routine things, and they don't really know what they're working for in the end. They can take measurements and draw curves, but they can't interpret the curves. You have scores of people doing that in the different units. All they do is to match a curve, and then if the curve looks different from the standard they call the supervisor. But they don't really know what the curve means. They work by trial and error. You know that great Hollywood joke: the way to find out about life is by trial and Errol. [Laughter]

But nobody fully understands the way that light affects sensitive material. Light strikes the silver halide crystals of the film, and it "moves" an electron. Then you have what is called a hole in the crystal, and that renders the crystal vulnerable to development. Certain chemicals in the developer take over and further reduce the crystal to pure silver.

The grain is really chains of atoms (I suppose they'd really be chains of molecules) appearing as long filaments in the electron microscope. They come together and we see them as a "clump," or we see them as many "clumps" together. That becomes the gross physical grain. But what you see as grain in the print is really the spaces between the grains of silver.

Teiser: Has the grain been made smaller over the years that you've been working?

Adams: Oh yes, much smaller. We use developers that encourage that. First you have the natural grain of the emulsion, then you develop the negative and you get the basic useful grain. You can use silver solvents and reduce the grain size; they dissolve in the silver and that makes the grain smaller. But, as that silver has to go somewhere, some of it moves sideways and produces a "halo" that reduces the acuteness. I won't say it is a "fog" in that sense. It spreads from the borders of the grain, and instead of edges being very sharp and having a clean-cut separation of high and low densities, you get a certain softness. Using a developer with a lot of sodium sulphite in it does that.

But those are all technical things. There's no end to them. It can be very complicated.

[End Tape 21, Side 1]

Revising the Basic Photography Books

[Begin Tape 21, Side 2]

Teiser: In revising your technical series, are you finding a tremendous lot of changes to be made?

Adams: Yes, an embarrassing amount. The principles are always the same--the basic principles. But there are certain advantages in what's called the "thin emulsion film"--increased sharpness and less "scatter" in the high densities. You can't expand it as we used to with the thick emulsion. You can soften it. (Eastman makes only one thick emulsion film now: Super XX sheet film.) But there isn't enough silver in the thin emulsion film to permit great expansion of contrast and density. They have to be intensified in printing.

The wonderful waterbath system, which is really the saturation of the developer in the emulsion layer and letting that work itself out in water, then putting it back--soaking up more developer and then putting it back in water--does not work well with the new films. The thin emulsion films carry a very small amount of developer, so you have to make many developer-water transfers to get any effect at all. In fact, it's almost impossible, because the developer exhausts itself so quickly--there's so little of it held in the emulsion. We can develop in nitrogen-burst agitation, which is quite complicated but good for developing color films to exact densities. The nitrogen, which is absolutely inert, bubbles up through the developer and "agitates" the solution.

Then we have all kinds of new developments in photographic paper. When they made their first bromide paper, there didn't seem to be much silver in it; it was hard to get high densities--good blacks, in other words. So Amidol developer, which has a very high-reduction potential, was used, and it did help. It was found that there was enough silver, but that there wasn't enough of what Dr. Mees called the "mustard speck" or the "sulphide speck," which is part of the emulsion structure and which rendered the silver grains more sensitive. That was discovered during the war, when the gelatin from Southeast Asia was cut off and we had to use local gelatin. They were loading everything up with silver but still couldn't get density. Then they discovered that the gelatin from the South Pacific contained a much higher degree of sulphur, or sulphide. So by a simple addition of this to this gelatin, they were able to use a minimum amount of silver and get a rewarding amount of density.

Adams: Now they're making synthetic emulsion, which unfortunately has a greater effect of expanding and contracting and "drying down" (the high values lose brilliancy when dry). Varilour, which is a variable contrast paper, was a perfectly beautiful paper in the past; but now the prints look wonderful when they're wet, but as they dry the emulsion contracts. And what were beautiful, scintillating whites become grayish, depressed in value.

Teiser: Are you, in your revised texts, giving as many formulas for solutions that the photographer mixes himself, or are you advising more proprietary formulations?

Adams: I think I'd advise the proprietary.

Teiser: There have been more come on the market, have they?

Adams: More come on the market. There are certain formulas you have to mix, but what's the use of mixing selenium when you buy selenium toner prepared? What's the use of mixing D 72 when you buy Dektol? So, what's the use of making up Beers A and B when you can get Selectol-Soft? You continue that just because some people believe in it. Selectol-Soft, which is Metol (they say right on the label what it contains)--what is the name of it? Monomethyl para-aminophenol sulfate. There is [also] Phenidone, which is equivalent to Metol in action, but it's not toxic. Then a lot of these developers are prepared with what we call buffers (pH control) and sequestering agents--a funny name, but it means they sequester metallic ions and keep the solution relatively clear.

Teiser: You must have to keep tremendous files of reference materials.

Adams: That's one of the points--I have a very large file of technical information which is obsolete!

Teiser: What are you going to do with it?

Adams: Well, there's nothing to do with it--it's all in the records somewhere. It isn't anything secret. But if I give a table for two-solution development using thin emulsion films, for instance, it isn't going to work as before.

Teiser: So you've had to keep all your technical files up?

Adams: I haven't kept them up as well as I should, but there isn't much variety--actually, when you stop to think, it's what a pianist has to do when he comes across a strange instrument. He has to adapt to the instrument. He can't change the instrument.

Adams: You take a Hammond organ, for instance. If you have twenty-four speakers in a big cathedral you can get the most extraordinary illusion of a pipe organ. A Hammond organ can produce all of the sounds, but it's the resonance in the spaces that gives the effect. People say that's crazy. But they had, I think, a twenty-four-unit Hammond at the San Francisco Opera House. I remember trying it once. I was absolutely amazed at the organ quality. But when you hear it coming out of a squawk box ten feet away, it's not organ music as we think of an organ.

Hawaii Books, Continued

Teiser: One thing that occurred to me as I was looking at The Islands of Hawaii afterwards was that this is a very fresh view of Hawaii.

Adams: It's not the Hawaiian tourist bureau's view.

Teiser: How did the Hawaiian tourist bureau look upon it?

Adams: Hawaiians, I think, liked it.

Teiser: I should think so. Did you have a hard time finding those things, or was it easy to--?

Adams: Oh no. They're wonderful people. They were most cooperative.

Teiser: But I mean visually, when you went about--

Adams: Oh--photographically, I think it's a very difficult place. In color photography in certain ways--David Muench has got some pictures in the last Audubon magazine of lava--actual red, liquid lava--that are fine. If you take things early or late in the day and get spectacular light and shadow effects, you can convey the "feeling." But to me the Hawaiian Islands are largely black lava and green foliage, and then some parts have reddish oxidized lava, like on Kauai. But the colors, except at sunset and sunrise, are pretty drab.

But we had all the lists of where to go and what to see, and we did most of them--a lot of things that the average person never sees. And of course in the first book for the bank we got into industries, and that was something else, when you have your macadamia nuts and the fiber business and cattle ranches--the Parker Ranch on the Big Island and the sugar and taro fields.

Teiser: Is the Parker Ranch color picture in there, that Mrs. Adams took, her only published work?

Adams: No, she did the back page of Arizona Highways and one of the figures in the Mission San Xavier del Bac, and it's the best color picture of the whole series. She did it held by hand with a little Zeiss Super Ikonta B. [Laughs] I always kid her; I say, "You know engravers can work miracles." [Laughter]

Teiser: We were talking yesterday about double-truck pages in connection with the American Trust book.

Adams: Well, you see, the ideal double truck is one that comes at the center fold, so there doesn't have to be split printing, that is, half the plate on one form and half on another.

Teiser: Yes, as that did. But there are some good ones in this Hawaii book.

Adams: Well, it's all right. But you see, except for center fold, you always come into the gutter. Part of the mechanicals of good design and printing is to consider the binding, and then being able to divide the plates enough so that when you open the book and look at it, there may be a division without part of the image lost in the gutter. That's one advantage of a horizontal book--you don't need double trucks.

Teiser: It's a temptation, I should think, to make album-shaped books.

Adams: I don't mind a horizontal book, but conventionally, a book is supposed to stand on the shelf. It's all a convention. The first book we did on Hawaii was horizontal. The advantage of a squarish book is that you can have vertical or horizontal pictures on one page, each up to optimum size. But once you go across two pages, you have that problem.

Now, it's interesting, in the Death Valley book, in the color which is just the magazine color, really, one side is very weak. Now turn that page over and see how much stronger the colors are on the other side. Now turn the next page and it's weak again. It's folded this way. The fold isn't the way you think; it's the other way!

Teiser: These pages were printed together on one side of the sheet and those were printed together on the other side.

Adams: You see how much richer one side is.

Teiser: One thing that occurred to me as I was looking at all of these (and I think you've mentioned it), you have few human figures in your photographs. I was particularly reminded of it as I was looking at one here called "Miner's Doorstep," where there's a foot that represents a man--

Adams: Yes, and a hand down in the lower one.

Teiser: That's a much less dated kind of image, of course. Why is that--?

Adams: Well, it's just a problem that people--I always say this: there is always one person in every picture and that's the spectator. Perhaps two--the spectator and the photographer. If you do a person and the person is sympathetic--understands and will take a position which is perfectly natural for them, like my trailer camp children--there is no question of authenticity.

There's a photographer who's done thousands of pictures in color and he wears a red shirt and he has a self-timer on the camera. So he sets up his camera, then the self-timer, and he goes dashing in and shows himself looking at the scene. (Of course, the worst of all is somebody pointing.) It intrudes something that is hard to explain. Some people demand people in everything, and I don't because I would rather see people separate than people in landscape.

Teiser: In a photograph that I remember in The Islands of Hawaii you used someone as the only possible way to point up the distance. Maybe it wasn't the only way possible, but it was a very effective one. You have a road, and a figure--

Adams: Oh yes, in the lava area. That's Virginia walking down the road. It's the old Kamehameha Highway. That does give a sense of scale.

Teiser: I don't see how else you can possibly achieve it in this.

Adams: It is important. That element of scale is a very vital thing in photography.

I've got a wonderful bunch of pictures of the Sierra Club people and Sierra Club campsites. I've got to get those printed and do something with them. They're historically important. They may be lousy photographs as such, but they do give you a feeling of time. As somebody said, "Time and the wrinkles flowing."
[Laughter]

I got by one time at a lecture at the Century Club when I was talking about retouching portraits. I said that the only function of retouching is not to destroy the character of the face and not to take out all those....And I suddenly realized that the audience was mostly over fifty. I was young enough then, and I had a quick comeback. I used the words "benefits of time." [Laughter] I got by with that very nicely, instead of "lines and wrinkles." [Laughter]

Signed Prints and Limited Editions

Teiser: One other question. This is for the record: when you sign a print, it means what?

Adams: If I sign a print, it means I did it and I approved of it.

Teiser: And what do you mean by "did"?

Adams: I made it; printed it myself. First, it's my photograph--my negative--and second, I made the print. Now, if I didn't make the print, I would write on the back, "Print by So-and-so," such as [are] applied to my special edition prints. Liliane De Cock made some very handsome ones. We just started out in the morning working together and decided, "This is it." Then she made many duplicate prints and I'd sign them (I initial them now).

Teiser: You made a master print?

Adams: Well, yes. We made the prints in the darkroom with the same chemicals and the same control as for "fine prints." It wasn't as if she had taken the negative and had made a print remote from my concepts, but she got the intended quality. Most of the Renaissance painters and Diego Rivera and everybody I know of who does anything of any scope at all had assistants who did a good part of the work. In Rivera's frescoes, he did very little of the actual application. He did the design and the edging and dictated the colors. But somebody did the detailed work. It remains very definitely his work.

If somebody comes in and picks up one of my negatives and takes it to his darkroom and makes a print of it, and it doesn't look like my photograph, then I couldn't approve or sign it. I don't think I could have anybody else do the "Moonrise, Hernandez, New Mexico." I'd have to do that myself; it's very difficult, and the personal touch is there whether you realize it or not.

I think you sign a photograph because you stand back of it saying, "This represents what I intended, and I made the print."

Teiser: Don't you think you probably do more darkroom work than most photographers?

Adams: A lot of photographers, especially Europeans and many in this country, have all their processing and printing done for them by laboratories, and these laboratories are extremely good. I mean, technically. They're very fine and they seem to try to think of what the photographer wants. But this relates mostly to documentary photographers, and most of the European photography is related to

Adams: reproduction work. People don't buy fine prints as they do here. So there are very few good printers in Europe. In fact, the quality of prints I've seen from most of the European photographers is just ghastly. The images may have great flair and imagination, but the print seems just a necessary evil. "We make this contrasty print and get it to the engraver." Cartier-Bresson, I think, doesn't make most of his own prints. People have said that he sometimes does; but his work doesn't seem to have that particular quality of "individual" printing. It's a complex problem.

If I were a composer, I could compose songs, but I can't sing. I think most composers who compose with piano can play. Ernst Bacon composed perfectly beautiful songs from Emily Dickinson's poems, but he can't sing a note. I may go out and get a perfectly handsome series of photographs and let somebody else process and reproduce them, but they wouldn't have that particular personal thing that a print should have.

We can say one more thing, about limited editions of photographs. As the sale of photographs is becoming more important in this country, the collectors are demanding that the editions be limited. Now, heretofore we just sold prints as people ordered them. And we did portfolios. All my portfolios were limited, and while I did make other prints from those same subjects, they'd be different prints, and in different sizes, but they wouldn't be the same print. When we came to Portfolio Five, we had a strictly limited edition of 110 copies for sale, and then the negatives were canceled and cannot be printed again. In that way, the person who buys this realizes he's getting something that has a certain value because of its limitation. And yet it's negative or false to the full potential of the photographic medium, which allows you to make as many prints as you wish. A negative doesn't wear out. Edward Weston had a limitation of fifty prints. He'd write on the print "6/50," signifying the sixth print of a possible fifty. He very seldom sold more than four, five, or six prints of a photograph, but many of a few which were very popular. The same thing happens to me. I have hundreds of photographs of which I might have sold only one or two or three, and then I have others that I've sold tremendous numbers of prints.

Teiser: Did he destroy the negatives when he did fifty?

Adams: No, he just wouldn't make any more. But I don't think he ever hit that limit. Edward was extremely ethical.

I think I've probably sold more prints from a few negatives than anybody I know of in modern times. I have that "Winter Sunrise," and "Moonrise" and "Mount Williamson" and, oh, some of the Yosemite--"Half Dome," etc. And they go out over the years in very considerable quantity. I call them my Mona Lisas. [Laughter] But

Adams: the prints that are in the portfolios are perhaps the ones that I have really sold the most of, because all of the portfolios have been sold seventy-five, a hundred, a hundred and fifty, or more of each.

Dreams

[Interview XVIII -- 14 July 1972]

Adams: Yesterday I was having a family meeting here, and my son and daughter-in-law and her uncle flew over and back to Fresno. Chartered a little plane. Last night I had a dream that I was in that plane, but I was tucked in the back, and they couldn't land. Had to fly all over Fresno. It was perfectly clear at the airport, but they couldn't land. And the pilot was saying, "I just cannot put this plane down, and we're going to get out of gas pretty soon." It went on and on and on. It was one of these extraordinary dreams--you wake up in a cold sweat because there is no logical reason why you couldn't come down. He didn't say the landing gear was--he just said, "We just can't put the plane down." Talk about suspense!
[Laughter]

I think I told you my terrible nightmares of finding myself in a taxicab going to a concert hall, seeing great big placards posted on the wall: "Ansel Adams playing Beethoven Fourth Concerto with the Boston Symphony." I arrive backstage, and I go in and meet the conductor and I go through all the preliminaries, and I'm getting more and more anxious. I look and see the hall is absolutely jammed. And finally the orchestra goes on and then the conductor says, "Please go in," and I don't know the first note of the darn thing I am to play! There's the enormous piano, and I sometimes get to the piano stool. Usually, I wake up with heeby-jeebies.
[Laughter] It's a recurrent dream. It would be interesting to figure out why. I never get to playing anything, but I'm announced as the pianist! I recognize, I think, all the members of the orchestra as musicians I've seen at the San Francisco Symphony. Everything is so real and so absolutely improbable and horrible.

1963 Exhibition and *The Eloquent Light*

Teiser: I think we've talked a couple of times a little about the 1963 exhibit at the de Young Museum, but I just wanted to round it off. Can I read from a review of the exhibit? This is in Aperture, second number of 1964, by Michael Gregory. I'll just read a couple of paragraphs.

Teiser: "In San Francisco's M.H. de Young Museum, the highlight of the winter season was Ansel Adams' 'Retrospective Exhibition,' timed to accompany the publication of the first volume of Nancy Newhall's biography of Adams, entitled 'The Eloquent Light.' Between November 5 and December 8, more than 130,000 people came to view this incredible display of forty years of genius. Four hundred of Adams' photographs--from immense murals and screens to exquisite miniatures--were distributed through ten of the museum's galleries, constituting all together the largest one-man show in California's history....Adams' 'Retrospective' must certainly become one of the major milestones in the history of photography in the United States."

Then there's a comparison made of your work and Chinese landscape painting. He doesn't impute any, I think, influence, but just happenstance. And he ends with, "The photographs of Ansel Adams are at once finished symbols and rituals of our own awareness that are simultaneously the way and the goal. What is to be known is identical to the way of our knowing it. His photography, finally, does not really mean or render; it indefinably and mysteriously is. As witnesses or as disciples, we are initiated into the vast and subtle harmony of nature, and we hear across the ages like an echo the contrapuntal harmony of our own forgotten humanness."

Does that seem appropriate to you?

Adams: Oh, it's all right. I guess it's a good criticism. [Laughs] There's always a difficulty of verbalizing. I remember that Chinese landscape relationship. I can't make the association, but he did, so that's all right. Yes, it's good. But I'm no one to judge that--

Teiser: Well, it seemed to me apt. Of course, you don't see your pictures as the viewers see them. But don't many viewers react in that way, to your knowledge, to your photographs?

Adams: In a great many reviews in the East, the comment has been on the lack of direct human content. They say, "There's nobody ever in your pictures." And I always say, "There's always one person in the picture, and that's the spectator." Put it this way: people have the urge to write; some people try very sincerely to make an interpretation. Others just fill up space with facts.

Yes, I think in that way it's very good, but you see, I had a surfeit of musical criticism and what I call the "program notes syndrome." Well, music just can't be put in those compartments. Verbalization bothers me.

Teiser: You think photography should stand for itself. Am I saying that right?

- Adams: Yes. If somebody asked me to review a show, what would I do? If I accepted doing it, then what would I say? I suppose I'd say something very much like the above critic did. He apparently liked it; there's nothing negative in his comments. But I just don't know. I've always had a blank spot in my consciousness about writing about art in any form.
- Harroun: Beaumont Newhall wrote about this show. What magazine was that in?
- Adams: Popular Photography or Modern Photography--one of those. The editor asked him if he shouldn't be more "critical." His idea of criticism was that you've got to be a little nasty about it or the people won't read it!
- Teiser: I suppose you remember what I thought was a very inadequate review that the Chronicle had by Thomas Albright of the exhibit at Stanford this spring of your portfolios. He said he was kind of begrudging (I think that was the word he used) in his admiration of your photographs. But he thought he detected a progress toward more "humanness" (I'm not sure that was his word, but I'm sure that was about what he was saying) as time had gone on in the sequence of the portfolios.
- Adams: Yes. Well, Portfolio One had one picture of Stieglitz in it. Portfolio Five--
- Teiser: I don't think he was meaning people in them, but a human quality, whatever he thought a human quality is.
- Adams: Well, a show by Los Angeles photographers got a very fine review this morning. It is in some way "human." The "something vacancy." It is an extremely interesting show--a terrific number of very ugly photographs, which are quite in line with the subject. But it's a matter of social and situation approach rather than "lyric."
- Teiser: It is the exhibit of photographs of not yet completed houses in a tract, and so forth?
- Adams: Yes, that was part of it. The whole idea had a very disturbing but rather accurate feeling about it. Again, it was only from one point of view.
- Teiser: To get back to this 1963 exhibit--you said, I think, before, that some people felt it was too large. On the other hand, I'm sure a lot of people didn't. But otherwise, were you satisfied with it? Did you think it came off to your standards?
- Adams: Well, I thought it was an extraordinary job--Nancy Newhall put it together with great imagination, and it was beautiful to look at, and the hanging was fine. The lighting wasn't too good, but that

Adams: wasn't anybody's fault--the museum didn't have the circuitry and the money to add to it. That's one of the things that's a tragedy with museums and galleries--they don't design for adequate lighting. And it isn't just a matter of putting in more lights, because you have to have the circuits to carry them. I've got just a certain number of watts available in my ceiling circuit [pointing up]. Now, if I had to load that up from 300 watts to 500, we'll say, things would blow. The museum did the best they could with it.

But I think the great thing about that show was how things were spaced and how Nancy used artifacts and natural objects as decor and mood stimulators. I thought it was probably the best show I've ever had or will have. I don't know what the Metropolitan Museum one will be. I don't know whether I'd feel the need of such a thing now. It was a rather flamboyant introduction. Mrs. [John S.] Logan of the Women's Auxiliary instigated it. They made thousands of dollars for the museum, but they practically had to hold a gun at Paul Masson to get the champagne for the opening party and at Podesta for the flowers! They were absolutely ruthless. And there were--I forget the number of people--seventeen hundred, maybe, at the opening, and that's a lot of champagne! [Laughter] They collected admission for the opening, and it went to the museum fund.

Teiser: I remember the exhibit. It was very impressive. It was one, of course, where a difficulty was that some of the people were so interested in some of the pictures that they wouldn't move.

Adams: Well, in saying it's too big, you may mean that you can't possibly encompass it in one visit, and people resented having to come back. They can't see it all, and they can't stay, so they may have a resentment. But that would happen if you went to any museum, like the Louvre. With a one-man show, such resentment is more obvious.

Teiser: Did the book The Eloquent Light come out after the exhibit?

Adams: As I remember, we had some on sale at the museum--some advance copies.

Teiser: Was that book a big success as a publishing venture?

Adams: Well, I would say it was pretty good, but it was expensive to produce. We've just heard the number two may be published by the Sierra Club and Aperture. It will still be expensive! The thing that I think is going to make money will be the little monograph that Morgan & Morgan are doing [Ansel Adams]. That will be in the \$9 or \$10, \$12 class, which makes a terrific difference with students. If we could get The Eloquent Light book in paperback,

Adams: then that would be ideal. But most photographers just can't afford \$35 plus for a book. I know most of the Sierra Club people can't afford all these exhibit format books. My gosh, they are \$25 up to \$55 each. You have to be a really well-to-do person to fill your library with that kind of material. So many students--people in photography--are limited to less expensive items.

Teiser: Did The Eloquent Light book and the exhibit together have any appreciable effect on your life? Did anything change for you?

Adams: It helped crystallize a "direction," I guess. You don't know what those things do for you. There comes a time when a good aspiring photographer thinks that a cover on Life would be just the apex. So he gets a cover on Life, then so what? I get a big one-man show; oh boy, that's the most wonderful thing that could happen! And it happens and that's that! So things go on and on. You approve of these things if they're constructive. But once they're done, they're done. You can't brood about the things that are not so good.

Teiser: I wondered if it had direct effects like immediate increased demand for photographs for publication and that sort of thing.

Adams: In that way, yes. Not so much publications, but I guess the show helped sell the book. What it did do was to step up the sale of prints. The main sales came from when The Eloquent Light was at the Boston Museum, because they had a little notice up that prints could be acquired through the Carl Siembab Galleries. The museum didn't want to sell; it had no machinery for selling. It would have been quite an undertaking for the museum to start selling prints.

Traveling Prints and "Theme Shows"

Teiser: Was it exhibited in just those two museums?

Adams: Oh, it traveled all over the country--went first to Barnsdall Park in Los Angeles. Then it was cut down in size. I think that the one in Boston was about half the size of the original show. Then it was cut down to quarters! It's still going. But the interesting thing was--a thing that was very difficult to understand--that little museum at Barnsdall Park--they put the whole show up, with the exception of what was in the floor cases. They had them stacked in the old 1890 way on the wall--you know, one over the other. And thousands of people came to that exhibit. I think it was one of the things that did photography good in being recognized in art museums. Because that's the first time, to our knowledge, that a show of that size was given in a regular museum.

Teiser: Is it still traveling, or is it still available?

Adams: Part of it is.

Teiser: Suppose somebody wants it, how do they get it?

Adams: Eastman House has it, I think.

Teiser: Is Eastman House the custodian of it finally, in the end?

Adams: Yes, they kept the prints. Now the big prints are down at the Amon Carter Museum, but have been moved temporarily over to the Admiral's Club in Dallas at the airport, and they have created quite a furor. I've been getting quite a few print orders out of that.

Teiser: Actually you owned the prints yourself originally, I presume.

Adams: Yes. That's a difficult thing. You own them, and you charge it off to promotion, I guess--publicity--as they go to pieces. The thing that got me down was the frames, because they said they would pay for the frames, and then they didn't, and that was quite a lot of money. There were some big frames.

Teiser: But then you presented them to Eastman House, in effect.

Adams: Oh yes. When we got all through with it. I mean, it came back in fair condition--chiefly broken frames. Now we charge a definite fee, except for some private gallery or museum. If a gallery writes and wants an exhibit, they have to guarantee, say, \$25 a print--\$15 or \$25, depending on what they are.

Teiser: This is for private galleries?

Adams: Private galleries--or small places. Because they don't handle photographic work too well--financially and otherwise. A gallery in Chicago sold \$3700 worth of work, and then sent me a check for \$500 and said, "That's all you're going to get because we've gone broke." The prints that came back were ruined! That's just "one of these things." And yet they weren't dishonest; they just didn't know what they were doing.

[End Tape 21, Side 2]

[Begin Tape 22, Side 1]

Teiser: Your earlier exhibit--of your own work and others that you and Mrs. Newhall arranged--

Harroun: "This is the American Earth"--

Teiser: Those prints, of course, were from many photographers.

Adams: But that was a different kind of show. That was what we call a "project show," like "The Family of Man," or a "theme show"--that's the word to use, really. It's the use of photography in expressing ideas.

Teiser: Who owns those prints now?

Adams: Oh well, they've gone to pieces. They've just been worn out.

Teiser: They're no longer in existence.

Adams: They were fine prints, but of a type. You see, the really fine print, the exhibit print, which is in effect a work of art, should be taken care of and presented and handled as such. Now, when you make prints for big exhibits--theme show exhibits--especially ones that are mounted on panels, you just say, "Well, these have a different function." And the prints are usually larger than you'd ordinarily make, and while you make as good quality as you can, they still aren't up to exhibit quality because in the first place they have to be on a different paper and lacquered for protection. You have to adjust to the situation.

As I said, "The Family of Man" should have been given under the auspices of the United Nations, because then it would have been a theme show in the proper environment, and nobody would have worried whether the photographs were really fine prints or otherwise; it would have been images shown for a social purpose. Showing at the Museum of Modern Art, it set a standard of sloppy work which we haven't lived down yet. It just knocked down the discipline of fine quality under the very erroneous idea that fine quality is "precious," and has really no meaning. And that's bothered me very much.

Teiser: As I recall, they took that show to Washington so that the senators and President could see it.

Adams: Well, we had shows, "I Hear America Singing" and "A Nation of Nations," which were sent to different countries. But we had to change certain pictures, say for the Moslem countries, because showing people in white represented mourning. And the pig is a very unclean animal to Moslems. We had a beautiful scene of a pig farm, but we couldn't use it! All these State Department experts had to give us the so-called "low down," and it was sometimes very embarrassing and difficult to find something to fill the spaces. Very strange, but we had to think of those things. We showed a beach scene of Coney Island with women in bathing suits--bikinis, in fact. You can't show such pictures in Moslem countries. It would be considered definitely pornographic and would be torn down

Adams: or defaced. It's a very real thing and relates to their creed. They just simply resent it, and it wouldn't do the United States any good to force these images on them. How the Arabs get by at cocktail parties is anybody's guess, because--I've been to a few places in Washington where there have been quite a few Arabs--Moslems I guess would be the better word for it--and they always have fruit punch for them. Muhammad says "No." [Laughter] Their belligerent attitudes are probably due to the lack of the calming influence of an evening drink. [Laughter]

Did I tell you what somebody said to Golda Meir? "I wonder how you stood up so well under the extreme external and internal political and war pressures," and added, "You seem to be holding up just splendidly." How do you do it?" She said, "For me, a new problem is a vacation." [Laughter] I feel that way too sometimes.

Honors

Teiser: There is something we haven't discussed at all, I suddenly realized, and that's your honorary degrees. The University of California gave you an honorary degree in 1961, and I have the text--

Adams: Well, all I know is that Dr. [Clark] Kerr wrote me and said, "The President and the Board of Regents wish to confer an honorary degree upon you. Will you accept?" Of course, I said I'd be honored to accept. There was no speech to be given, thank God. But at Occidental I did have to give the commencement address for the degree received!

Teiser: Was that another doctorate? I know the University of California gave you a Doctor of Fine Arts.

Adams: Occidental made me a Doctor of Humane Letters.

Teiser: When was the Occidental degree?

Adams: Sixty-seven, something like that. It was a very pleasant occasion. And then I was a Chubb Fellow at Yale; was there for four days. Then I got an honorary Doctor of Fine Arts from Yale.

Teiser: At the University of California, Dr. Joel Hildebrand, whom you were mentioning the other day, conferred the--presented the--

Adams: No, he was my sponsor. And in the ritual, he has to touch his cap, and the president touches his cap. He presents me. It was very formal. "I have the honor to present the candidate for honorary

Adams: degree." And then he stepped back, and then I stepped forward--fear and trembling. Really, I never have stage fright, but when there's twelve thousand people, and there's nothing to do, I guess that was the breaking point! [Laughter] Those things are fairly impressive occasions. I hope they don't cancel them, because they do have a certain dignity of recognition--not only for the recipient, but to acknowledge the whole idea of honor for some distinguished service, at least. You're supposed to take off your cap and leave it on the chair. You are given a list of instructions. I forget how it was, but you receive a certain nod, and then you and Dr. Hildebrand will rise, and Dr. Hildebrand will step ahead of you and present you to the president, and then Dr. Hildebrand steps back and receives the hood, and somebody else has got the scroll. And everyone's gotten up, and the president reads the citation and shakes hands and somebody throws the hood over your neck. (Sometimes they miss, and it's very funny! It catches and pulls everything around.) Then they have to remind you that the tassel--I forget which is the graduate tassel--it's on the right side, isn't it? Yes. "Please see that the tassel is on the right side at all times." Then you have these hoods and you wonder what to do with them. Dr. [Alexander] Meiklejohn had his original Ph.D. hood that he got something like seventy years earlier; it was moth-eaten and frayed. And Mrs. Meiklejohn used to become furious--"You can't go in a procession with that." He said, "That's my most prized possession." [Laughter] Of course, some of these academic robes are very gorgeous--Oxford is spectacular. The one from Belgium is a very strange outfit: white tie and tails and a top silk hat! Robes from South Africa or middle Africa would be brilliantly colorful. And then a few grim "regionals." [Laughter]

Teiser: You had known Dr. Hildebrand for many years?

Adams: Oh, he is one of my oldest friends. A perfectly wonderful man.

Teiser: You mentioned that he should be interviewed. He has been interviewed by our office.*

Adams: I think he also should be interviewed for the Sierra Club because he's got some pretty potent ideas. He and Tom Jukes. You know Tom Jukes? He's wonderful. He's a physiologist--I never know exactly what he is. He's in the Space Sciences Lab. He's a top scientist. Well, he's done a great deal of work in nutrition and

*See interview with Joel H. Hildebrand, Chemistry, Education, and the University of California, Regional Oral History Office, The Bancroft Library, University of California, Berkeley, 1962.

Adams: development and control of pesticides. Of course, he has a concept of the whole pesticide situation which is very different from the popular one today. He looks at it as a possible genocide situation. Cut out DDT in certain parts of the world and you'd account for twenty million deaths a year. If you want that responsibility on your neck, why, you're welcome.

But I saw a television program when I was recently in Los Angeles. A group of scientists on both sides of the fence, top scientists in the field, and they had equally plausible arguments, pro and con. So the poor layman like me gets in the middle of it, and what do you do? That's what happened to me in the Sierra Club. I just couldn't sit there and vote on many of these measures because I knew nothing about them. You look around and you say, "Who do you trust on this? I'll go along with the one I respect most." And that's about all you can do. They are bringing up problems that are immensely important, but if you vote on them emotionally, you might be doing a great deal of damage.

Teiser: When you gave the Occidental College commencement address, what was the subject? What did you speak on?

Adams: [Pause] What was the subject? "Give Nature Time"--that was the title. It was a little more positive than usual. I've always supported the fact that man, being a very natural creature too, both progresses and regresses with the whole biosphere. And he may cause himself a lot of trouble, but we hope in time it will be balanced. Of course, there may be great losses and danger. Nobody knows yet what happened to the dinosaurs! There's some conjecture that there was a supernova fairly close, with strong radiation effects creating mutation, which certainly could do disastrous things. If the 1050 nova, for instance, had been not three thousand or more light years away but in our immediate stellar region, the radiation might have been very serious. We also may have had changes of temperature. Anything can happen and probably will. [Laughter]

Fiat Lux

Teiser: Here's Fiat Lux, the University of California centennial book. I think you told us something of the circumstances of its publishing. Anything you have to add about that would be very interesting.

Adams: There was a reception at Dean McHenry's home at Santa Cruz, just at the beginning of the University [Santa Cruz campus], and we were invited. And Dr. Kerr--President Kerr--met us at the door--Virginia and Nancy Newhall and I. And he pointed at Nancy and me and he said,

Adams: "You're going to do the centennial book on the University." We said, "Well, why not?" Those were the days when the Regents had money to do special things, and they budgeted a round sum of \$75,000 which would be devoted to the costs of texts and photographs. There was no royalty. It was entirely up to us. We had enough money, and we also had a reputation for coming through. All they wanted was that the money spent would have receipts, so that the accounting office in Sacramento would be satisfied. Everything we did was okay, but they wanted to see the "paper." It was a complicated matter of keeping every slip for lunch, dinner, mileage, and all that. Nancy had her work to do, and travel, as I had mine, and we "pogo sticked" all over the state because I found that working in a certain campus, in four or five days I was through for the time. I just couldn't "see" any more. It's terribly hard to try to make inspiring pictures out of sometimes very uninspiring architecture or situations. I might have gone out with a little 35-millimeter camera and just gotten moments of people. But I don't work that way, and they didn't want me to. It was entirely up to us. There was no dictation at all.

Teiser: Did you have anyone to confer with, though, about what's going on here and what's going on there?

Adams: Oh yes, we'd go and talk to the chancellors and we'd have meetings with professors and students.

Working with the stations, such as the Lick Observatory, I found easy. It was "old hat" for me; I knew that whole group. And then we had worked with marine biology, etc. The difficult subjects to handle were the "abstracts:" How do you do mathematics? How do you do social sciences? But we did good images of the tutorial projects.

The original plan of the book was to have a series of semi-abstract--call them "extract"--images which would head chapters or sections and which would set a mood. Then there would be a series of factual pictures, because the story had to be told. You want me just to run through it?

Teiser: Yes, if you will, and make any comments that occur to you.

Adams: I was trying to get the idea of the title, and the idea of "Let there be light." Somebody said this isn't ideal Latin, but we know what it means. The idea of the sun and the reflection on the ocean seemed ideal for the book jacket and title page photographs. I got this at Santa Cruz with my Hasselblad and the 250-millimeter lens.

Teiser: Did you actually have it in mind for a title page before you took the picture?

Adams: Yes. I was looking for it, looking for it, looking for it. I did quite a few variations, but I got too much flare in most. One day I was at Santa Cruz, and I saw light on the water, and I said, "That's it."

Teiser: What time of day was that?

Adams: That was made late in the afternoon.

Then I thought the best thing of all would be to have one of the Greek Theater assemblages--Charter Day, 1964. Adlai Stevenson gave the address--wonderful!

Then of course here again is a purely inspirational image, "The Pleiades"--a Lick Observatory picture, and again, it's an image which doesn't illustrate anything socially specific, and the text doesn't explain it. It just gives you the feeling of--whatever feeling it gives you!

And this is a multidimensional model illustrating population dynamics. These are little balls on rods, and there's a whole forest of them. And the size of the ball and the height of the rod and the placement on the grid reveal all kinds of statistical facts. These balls are only an inch, at the most, in diameter--in getting one to eclipse the sun was difficult. It was done with the Hasselblad 38-millimeter lens. The amazing thing was that this was a good example of serendipity. In putting a filter in front of the lens, the reflection from the filter gave this multipatterned halo effect. The filter surface was reflecting back to the lens, etc. But I could see it; I knew it was going to happen. This was purely photographic fantasy. And it's a good progression from "The Pleiades." These radiating lines on the stars are the defraction patterns from the grids--the supports that are holding up the secondary mirror on the telescope. People don't quite understand what it is: it's a telescopic effect. In a regular refractor, like the old telescope at Lick, you wouldn't get that effect. They [the radiating lines] are another property of the lens, and I guess that would be a reflection effect. You can count these all out. One, two, three, four, etc. Eight prime surfaces in the lens, all of different curvatures.

Then we worked with Berkeley and the Bay. The University as seen from Charter Hill or "Big C" Hill. It's a very difficult thing to do, because you have to be there at just the right time of day.

Teiser: I was wondering how smog has complicated such things.

Adams: It was bad enough twenty years ago, but it's much worse now.

Teiser: When you were a young man taking pictures was there any?

Adams: Relatively little. We had forest fires to worry about. You see the smog in most of the Los Angeles pictures. This is Sather Gate in Berkeley, incidentally, but here you can see smog.

Then the old medical center, which was becoming surrounded with new buildings. This was actually taken in fog. My uncle, my father's brother, was a doctor who taught here in that old building. The title misses a point here; it is really fog.

Then the stream of traffic--the freeways, taken in Los Angeles from a low-flying plane. I hired this plane, and we flew over those intersections, and the pilot was flying at a very low elevation. A police helicopter went right under us, a hundred feet away from us, and the pilot said, "I guess I'll get what's coming to me when I get back to the airport," because we were down to a thousand feet instead of the legal three thousand. But they didn't pay any attention. And I was using a Hasselblad and a 120-inch lens at 1/500 second exposure. You're going fast, the cars are traveling fast, and the compositions are difficult and transitory. See something exciting and try to tell the pilot how to tilt the plane, etc. Of course, the door's off, and you're tied in; it's perfectly safe.

Then, of course, this is a very typical view of Berkeley with the morning haze. Class change is always a problem. You have to get all set up and wait for nine o'clock, ten o'clock, eleven o'clock, etc., and the students move fast!

And then we had some of the groups--"Corner of Sproul Plaza and Telegraph Avenue"--just a normal group of students.

Teiser: This time you really put people in your pictures.

Adams: Oh yes. Of course, Clark Kerr made a wonderful statement: "The University is not engaged in making ideas safe for students. It is engaged in making students safe for ideas." A monumental statement and very true. Students are important!!

Teiser: The stadium picture with the Campanile in the distance--

Adams: This football picture was one of the most difficult things to get. I had to get on top of a house to make it. Oh, we had an awful time. The weather was bad game after game after game. But finally it cleared. This was made after the game was over, and the audience is dispersing. People seem to like it; it isn't the conventional image.

The San Francisco Medical Center was done with the Academy of Sciences in the foreground. And then Davis--

Teiser: Did you find Davis an easy campus to photograph?

Adams: No, the campus is tough, but the people are wonderful. The great Dr. [G. Ledyard] Stebbins in "Genetics Field Trip." This was done with a Hasselblad. The students in a graduate class were studying different strains of oats. There were two students from Africa. These were really advanced, trained people, and he had this group out in a field for a day near Santa Cruz.

UC Davis has a large-animal clinic. When this picture was finished, and they were going to get this horse ready for an operation, the horse got panicky and kicked the professor and nearly broke his leg. So we were persona non grata. [Laughter]

Here's Los Angeles, UCLA, which was very difficult. This was a reasonably clear day. I don't know; I think you just have to take your luck as it comes.

This is one of the breaks--the scuba divers at Santa Barbara. Most of the time it would be very dull--smoky or hazy, and nothing visual going on. These beaches really have natural oil on them--always have had. I found Santa Barbara probably the most difficult campus to work with.

Teiser: There's no planting much on it, is there?

Adams: Yes, but it's Santa Barbara, if you know what I mean. It's kind of thin but has nice people and a very fine staff. But from a scenic point of view--oh my!

Riverside I liked very much. The clock tower I don't, but the buildings are fine. This is a marvelous building--the Humanities Building. And the conservative people down there criticized this building because it had four front doors. They could think of a building only having one front door, but this has four equally important entrances, and they thought that was bad architecture! [Laughter]

Then I did quite a number of portraits, like the physics major at Riverside. "First person" pictures--just types. He's looking right at you; he's a real person, not a posed model!

And then these home classes at Riverside; the radio station; the bell on the top of the clock tower. This latter was done with a 35-millimeter lens--really squeezing in!

This is probably the best piece of architecture in the University. It's the Breezeway, between the physics and chemistry buildings at San Diego. The design is based on the floor's hexagonal benzene ring pattern.

Adams: And then the great Dr. [Harold C.] Urey, who was just wonderful to us. He wanted his framed pictures of his close associates in his picture; there's Dr. Hildebrand, and Einstein, and many others of the great scientists are there. These are all people that he worked with, and he wanted those in his picture if possible.

And this was to be a stylized big thing--the Fountain. Santa Cruz is beautiful. The architecture is difficult.

Teiser: You had taken photographs there earlier?

Adams: Oh, covered the whole area.

Teiser: Did you have to take any new ones?

Adams: Oh yes. Everything I took first was before any buildings. So, for instance, that's the only one here made before there were buildings [p. 50]. Crown College was the first one built; Stevenson College was the second. Here's the library. This is quite a fantastic fountain [p. 53], and I wish they'd given the name of the artist, because it's quite beautiful.

Then we had our real troubles at Irvine, with the smog and the desolation. That region is the ugliest part of California--dreadful place. And the buildings--the fenestration--are all designed to take care of what [William] Pereira called "the white sky" of Irvine; they shield from the glare. They all look like num's coffins from the Spanish Revolution! [Laughter] Early in the morning you could see the mountains, and then an hour or so after this was taken, you couldn't see anything because of smog--day after day after day. But we did have a thunderstorm, and this was very lucky. I think this one is quite typical of the architectural detail, and the planting. But it's very desolate, it's on that open piedmont area of the Irvine Ranch. When the trees grow it will be much better.

Of course that's the classical building [Doe Library, Berkeley]. Then you come across stylized pictures like this sometimes--

Teiser: What is that one?

Adams: Well, this is at the main library at Davis. We're looking at the libraries now. These books weren't there; they were in a case. They were moved here. And then by using certain darkroom techniques, like water bath, you get [the full image of] inside and outside. Those kids wouldn't be there in actuality. That's why this might be questionable. But how do you get all of these elements together, you see? It takes several trials to do it well.

The Blake collection, of course, is very fine, but here again, this book wouldn't be open in this place. But there it is, and the composition is "stylized." The camera position is designed to show

Adams: both the book and the library. Then of course the special libraries--
The Bancroft--"The Plate of Brass."

Teiser: You put it against a map.

Adams: Put it against a map of the period, yes. What else could you do?
The librarian picked the map, so we assume it's an accurate choice.

Then again, these people--"the Humanists"--they are direct portraits. Pierre Delattre in Linguistics, who could actually make designs that could imitate the voice. He could listen to your word and "design" it on tape and play the tape through and hear the realistic sound. He had some very interesting theories. I don't know what's happened to him or his theories.

Now, this is one of the first times they'd really used television in education. Here's one television microscope, showing a cell, and the second television is showing the background, and he has drawn this line on it, and there's his hand and his finger here pointing [p. 68]. And these are permanently on tape for review. They're constantly reviewing and perfecting the lectures. This happened to be a fairly important picture at its time.

Then the building of the Lawrence Hall of Science, which is now open to the public. That's up in the Berkeley hills. I used a very long telephoto lens, from down in the campus, of the Space Sciences Laboratory and the Radiation Lab offices.

Then the model of the new University Art Museum, and the museology class at Davis, which is very good.

This is an interesting combination. This was actually taken at the performance of Elektra. The audience were enthusiastically clapping, as you see. This [p. 75] was taken during the performance, with a very long lens that could "reach" far into the stage. Then I just took the second camera, turned it around, and made the people picture. Of course, they're out in sun, looking into this glaring light. I had trouble with facing the sun while photographing the shadowed stage.

And then the organ photograph. This was a kind of ticklish thing to do, working only with the existing illumination. It's one of the really great, beautiful organs in the country.

This one again, "Regents' Professor of Musicology, Riverside"--this is one of these problems, where you're attempting to show these books, which are original, first editions of the great classics (a priceless collection). And how do you photograph so you can read every note, and still come up and see the people and keep the geometry right in the building? There's no tilt showing. The organ is standing true. This is a good job, I think.

Adams: Then we go on to the Japanese Garden, UCLA. They had a very bad slide later, and the Japanese Garden was devastated. I don't know whether they've got it back in condition.

And then the painting class. This was up at Santa Cruz, near what is now College 5. Then "Fundamentals of Form, Irvine"--Santa Barbara, Davis.

And drama--this was made at Irvine in the morning fog. They were in a rehearsal. You must take advantage of things like that!

The movie class at UCLA was rather exciting.

And then you get into the so-called stations, of which there are more than eighty. Of course, I didn't do all of those. A lot of them are near duplications of research centers. I was very fortunate in getting the Lick Observatory and the 120-inch telescope when they had "dropped" the mirror, as they call it. They had taken the mirror out for realuminizing. This picture is done with available light, with the great telescope in vertical position, and the 120-inch mirror lying down underneath it to be taken to the basement for realuminizing. That was quite an experience; the most nerve-racking thing that they can do, I guess. This multimillion-dollar hunk of glass is moved from under the telescope and lowered into a vacuum chamber.

And then the radio astronomy [p. 94], and of course these are very small antennae compared to what they have today. I liked this idea of the lava, which is sort of indicative of the moon. Just think that at that time we didn't know what the moon really was like!

And then it went on into one of the really great institutions, the Museum of Vertebrate Zoology. This again [p. 97] is what we call a near/far image, where you have your birds, which are tiny things close at hand, and then reach back into the laboratory with complete definition.

This is at the Hastings station, up in the Carmel Valley.

And then the Deep Canyon [p. 100], which is a terrific place, south of Palm Springs.

Here's a case [p. 101] where the reproduction--this one of the cactus--is not good. The print was full of light, luminosity, and the reproduction is too dark and heavy. Philip Boyd was a Regent and a great benefactor and did a tremendous amount for the University. He was one of the prime developers of Palm Springs.

Adams: I think the Marine Biological Laboratory at Bodega is one of the most handsome buildings in the whole system. And this [p. 105] is again a detail--the sea anemones--this is what we wanted to do all through the book to "set the pace." We had to throw out many of these, because of space limitations.

That isn't mine, of course [p. 108]. That's a DNA molecule at about 112,000 times magnification. And Donald Glaser, who is one of the very top people--a Nobel Prize man.

Then we had the geology class out near Riverside. I found it fascinating--to get this group of students into the field among these great rocks. It's a symbolic image.

I didn't get to the top of White Mountain, but I got up over twelve thousand feet. I guess I got to thirteen thousand feet, actually. This is the "Haldane Gas Analysis"--a classic instrument. They packed it up to several hundred feet higher elevation for me, so I could get it and White Mountain in the background.

Teiser: Especially for the picture?

Adams: For the picture. I wanted to get it up in the rocks. Otherwise, it's just in a shed. That's one of the things that's awful. So many of these most important facilities are really very ugly--just sheds and dirty apparatus. Not really dirty, but they don't have certain basic aesthetic qualities.

Then this is the "Bubble Chamber Events;" the cosmic ray enters the Bevatron. Every once in a while this happens. This is merely a decorative picture. There's millions of these things. The layman couldn't possibly grasp what they mean. It just becomes a design--almost the added gimmick of a cosmic ray intrusion.

Then the first Cyclotron leading to the Bevatron; John H. Lawrence.

This [p. 122] is in a sense an important picture, the research over at the Livermore lab on the fusion process. Of course, I suppose this machine is totally outmoded now, but this was one of the important steps in containing plasma. You note these enormous bolts and massive structures when you're thinking of subatomic particles! The energies involved are very great.

This is the Chemical Biodynamics Laboratory. And Melvin Calvin, who's a wonderful man. He designed this circular lab. And I think looking at this--here again, what do you do? I mean, every lab looks alike. An expert will come in and say, "Oh, I know what that is. It's a gas analysis machine." So you have to make some kind of stylized organization and composition and hope for the best!

Adams: Willard F. Libby was the most difficult one; he just couldn't stop talking on the phone. He was all right in the end.

Then this [p. 128] was actual plasma illumination. That was extremely difficult to photograph. It was as bright as the sun--you have to look at it through very dark glasses. And I got this effect that seldom happens, called "the loops." See this white? They were excited about that. The interior of the plasma is controlled in a sort of a resonance with these highly energizing induction coils.

Then we got into the agriculture, which of course is terribly important. And how the University has helped agriculture enormously. For instance, John W. Huffman, who's the director over in the Salinas area. He worked in preplanting fumigation of soil [p. 136]. Great areas are covered with plastic and they pump in toxic substances to kill the nematodes before they plant.

And then the cross-pollenization in the pear orchards! Spring irrigation [p. 140] is important before planting.

There isn't any point in saying that one thing is more important than another. These rice fields looked perfectly wonderful from the air, but they were very hard to photograph; they're so brilliant looking into the sun [pp. 146-147]. This is a typical farm, with silos. The print seems too hard, but you are looking down from a plane into glaring water-soaked rice fields. They're really fascinating.

Teiser: The reproduction was too dark?

Adams: Too heavy. This was done with gravure, and we just didn't have the time to perfect it.

This was an infrared picture in the desert done for the Dry Lands Research Institute. Terribly important place.

Then here is a cotton field with an evening dust storm blowing.

Then this one of the palm grove is very interesting because the palms in this area are leaning in the prevailing wind. In order to make this logical I had to use all kinds of optical adjustments in the camera to correct them, and yet create what appears to be the level horizon. It was really something; you wouldn't believe that all these palms are all tilted. The wind has been blowing constantly and the entire grove has this tilt!

Teiser: I can't believe it when I look at the picture.

Adams: Well, the tilt would look terrible in a picture; you just couldn't understand it.

[End Tape 22, Side 1]

[Begin Tape 22, Side 2]

Adams: We did quite a lot of work in the School of Forestry. It was quite illuminating. The objective, of course, is to use about 96 percent of the forest products! And they're getting there. I don't know what the percentage is, but they use most of the slash and the wood chips. The wood chips, especially, are piled literally in mountains seventy-five feet high and more [p. 163]. In fact, they had to cut the height down because the weight created heat and they started burning inside--whisps of steam and smoke appeared from just the internal friction. They used to get rid of all this and burn it. Now they use it in all kinds of preparations.

Teiser: If your father's process had been successful, a lot of it would have gone into that, wouldn't it?

Adams: Yes. They took sawdust. But the chips, you see, are something else. I think they came into use a little later. The slash and everything is put through chipping machines.

We research the idea of denuded forests [p. 164], which were burned off, leaving only snags. Then, of course, the second growth, which is the revival. The great argument now is whether you should have selective cutting or clear cutting. That is really a very difficult thing to decide on, because the clear cutting wipes out the whole forest. Then you have to wait so many decades to get new growth. The selective cutting destroys the forest aesthetically, taking out this tree and that tree and creating scars. So the question remains whether you should just cut the whole forest out and plant anew, or work selectively. They have used helicopters. They fell trees and then take them out by helicopter. But even then there's no such thing as a natural forest retained. It's damaged, and as trees mature they will be cut. So to me it's a far more unnatural thing than complete elimination and starting over. This picture [p. 165] I think shows the visual effect of starting a new forest. I don't know how old that one is. Maybe twenty years. This was done in Europe, of course, for many years.

Teiser: Do they do clear cutting in Europe?

Adams: I think in some areas, yes. I'm sure they do. Great areas of too well ordered forest exist--trees planted in rows.

Adams: Then, of course, the University social service is tremendous--the clinics over at the San Francisco Medical Center, the radiology laboratory at UCLA. And I actually photographed a heart valve implant. This is the valve at the moment of being put into the heart [p. 168]. I spent the whole day at this operation. In the beginning it's quite an impressive sight. Everyone completely dolled up with the surgical gloves, mask, and gown. This surgeon said, "Now, Mr. Adams, if you wish to come over to the head of the table, you can look right in. We're going to implant the valve." The lens I had on the hand-held camera extended about a foot and a half away from the heart, and as I took this picture the lens hood fell off, bounced on the table, and almost fell into the body cavity. Fortunately it fell on the floor! And I could see all these people looking at me over their masks. If it had bounced the other way, I'd still be running down Parnassus Avenue--because the danger of infection would have been severe. The doctor said, "Well, it didn't happen. It's all right. We understand." But I got this picture, which for its time was very important.

And then the School of Law. What they call the practice court in Los Angeles. At that time quite a prominent woman judge was officiating. These were typical cases, where they assume certain things are taking place. This happened to be a rape case, which was very interesting. And the jury is impaneled just according to the rules, but of course it's all practice. The judge had to take notice that there was a camera in the room for purposes of documentation, and such would never be allowed in actual court practice. But it was really quite a thing to see the student trial, with everything extremely strict. Somebody like the prosecutor would make a break, and he'd be thoroughly called down by the judge. [Laughter]

And then the College of Environmental Design, Berkeley, and the School of Architecture in Los Angeles were very exciting.

And the engineering laboratory at Richmond. People don't realize what a huge installation there is there. Here [p. 176] they're studying landing patterns from the simulated cockpit of a plane. You ride in it and approach landing; they create dense fog. See these seas of fog coming in? They can actually manufacture fog, and the whole area will become absolutely obscured. Now, which landing pattern light is best seen? Pilots from all over the world come and ride this thing, which works as a glide approach. They can also take advantage of, I think, the United Air Lines training system, where the pilots look at a televised image--simulating the whole procedure. Whatever the pilots do goes on computer, and an incredible analysis of their actions is made.

Then, of course, we had the Air Pollution Research Center. This one [p. 179] is measuring the effect of cement dust on photosynthesis, with recording of light emissions and energy. These things look fairly

Adams: simple, but I tried to use the available light. You can always trick things up, bring a lot of lights in and theatrically illuminate the subject. I will use reflectors sometimes, and I had to use a reflector here to get enough light in this closed place. But what you're seeing is actually lights from above.

Then, the Extension Center and Continuing Education in Business. Now, a thing like that--what in the world do you do? A bunch of men sitting around a table with books and their name plates at a lecture. But it's very important.

The Lake Arrowhead Center and the Extension group at Santa Cruz. An art class in Los Angeles. Royce Hall jazz concerts. And the tutorial system in Watts.

This is the Sherman Indian Institute near Riverside. And the Berkeley student with the Mexican child tutee in Golden Gate Park. They'd taken the Mexican children over to the park and visited the museums, etc.

And then the final one of the Campanile is very interesting because of the sun going behind the balcony balustrade.

Teiser: Oh, that's it!

Adams: There was just a moment when you could do this. And I was chasing around with my Hasselblad, trying to get that at the right moment. Just a change of an inch in position would make a difference.

So, that's the book. It was a great experience, and my greatest admiration and thanks for all the people that helped me. It was fantastic.

Teiser: Over how long a period did you work on it?

Adams: Four years.

Teiser: Did you have an assistant working with you on the photography?

Adams: Oh, sometimes. Mostly I'd do it alone. You see, if I'd gone out with a regular complement of professional lights, that would be something else. Then you have to use a staff. I'd just rather move in, use natural light, and not try to force things. Sometimes you have to in certain cases; you just give up. I mean if I don't see anything, I have to admit it, and then I have to contrive. You have to be absolutely sure that your contrivance is never improbable. In fact, in that library picture at Davis, those students would be right in that position--they could be at the stairs talking. And the chances are that those books might or might not have been in that position. Books might have been, but not those books. So, you take certain liberties to get over an idea. As long as you know it's a contrivance it's all right.

Adams: But I would like to go on record on the tape as saying that it was a great experience, and the universal cooperation throughout the whole University was simply extraordinary.

Teiser: It must have been interesting to talk to people.

Adams: I only had one or two people evidence impatience because I was taking long. I know one astronomer was getting ready for a lecture in Russia--an astrophysicist. I tried to get him in his office, and there were papers all over the floor, and finally he said, "For goodness sakes, go ahead and take the picture!" I said, "Well, I'm not a snap shooter; I'm trying to get some feeling into this." "Well, all right, all right." So finally when I left he said, "I apologize, but I'm just under a strain to get my notes done." I said, "You did fine." [Laughter]

But some of the people didn't like moving machines around. Sometimes you had to move a computer device out of the way, and they'd get scared, and I'd have to tell them that I understood instruments, and I'd do this with the greatest possible care. Things like that.

Then I had one ghastly experience where Dr. [Donald] Glaser and some other people and I had two days of appointments to do portraits. I was using my Hasselblad with the 250-millimeter lens, so it would get a long distance effect. Usually take two or three rolls of each, to be sure of a good likeness. I checked at the end and I found that my shutter "bounced." The picture was taken, and the shutter bounced during exposure, so I had double images. Out of four rolls, there were three pictures I could use. Fortunately, one was very good. And that's what happens to photographers. I just went right back and worked for another two days and all came out well.

The unfortunate thing was that when we started the book Clark Kerr was certainly in ascendancy, and the University was absolutely tops in the world in many ways. Then the reactionary people took over and started cutting the most vital supports out. And the sad thing that happened wasn't just that they reduced expenditures, but they reduced morale. And that has not come back yet. Any ordinary university organization would, I think, have probably collapsed. But the morale of the University of California was so extraordinary that it was able to withstand to a great extent the tragic impact of the Reagan administration!

If a history of that should be written and fully analyzed some day--because it was a tremendously destructive period, with a destructive psychology involved. I think most of the personnel, the actual staff of the University were very, very good. Of course, some of them felt a little bitter when the activists took over in Berkeley. Many of them said, "Well, it can't be any worse than it is, so we'll

Adams: go with the activists." That compounded the trouble, because nobody knew where they were. I think that has quieted down now to a great extent. People like Dean McHenry seem to have done a beautiful job at Santa Cruz. I was impressed with the quality of the chancellors. Of course, I knew Chancellor [Emil] Mrak at Davis, who is a wonderful person.

So I just say it was a great experience, probably one of the most rewarding ones. I wish the pictures had been better and more inspired and the original plan could have been carried out. But since the University couldn't publish it and it had to be turned over to a commercial publisher, it was reduced in size. But the publisher cooperated to quite extraordinary degrees. It could have been very bad. It could have been canceled, or it could have just been done cheaply. But everyone did the best he could with it, and that's that.

Teiser: Let's get on the record where the pictures are. I think you said that you hold the negatives?

Adams: There's a whole collection of prints that are at the University, both proofs and reproductions and fine prints. I keep control of the negatives simply because if they want prints, I can make them with good print quality. They belong to the University, and they will go soon to The Bancroft.* They're University property which I'm holding in my vault. There's no reason why I should have them, except that I just did want to maintain some continuing quality, and any time the University wants a print of anybody in the University, they get it on a time-cost basis, which of course is highly variable depending on how many prints people want, and how many prints I can print at one time. I have to make very sure that somebody wants a special print. If one project comes in and takes a good part of the day, that's going to be pretty costly. But sometimes I'll get some orders for thirty prints, say. Well, divide it all up, it comes out very reasonably. I think I will take the privilege of making a few prints for myself, for my own record. It is a kind of responsibility.

My filing system is fairly understandable. It's the initials of the campuses--UCB, UCI, UCSC, UC stations--and the numbers indicating the negative sizes. It's very simple. They're all catalogued.

Teiser: Do you have anything more to say about this?

Adams: No, no. I don't think I gave you a very competent analysis of it. Except so many pictures were taken over such a long period of time! And I will say this, from a strictly professional point of view, I should have gone to one campus and just worked that out and then moved on to another campus and worked it out, and so on. But when you're doing a thing of this kind, where you're trying to feel your way, you just can't stay in one place too long. You suddenly become "blind" and you have to come home and process and look at what you've got and go to another place and get another flavor.

*Actually they are to go to the University Archives, a division of The Bancroft Library.

Teiser: Well, weren't you trying to do ideas, anyway, rather than primarily places?

Adams: Yes. But from an ordinary professional point of view--a professional photographer would have worked, say, at UC Santa Cruz--well, he might have to go back at a different time of year for certain things, but he would have covered most of the subject at one time. But I just can't work that way. I had the same problem with the national parks, mural project, and the Guggenheim Fellowship. I just couldn't stay in one place after the "dead" moment arrived. There just comes a point where you don't see anything, and you go mooning around and looking and nothing happens. And that's the time to go home. But sometimes you don't expect anything and something wonderful takes place. The pendulum swings naturally in both directions.

I must say that Adrian Wilson did a beautiful typographic design. Nancy assisted and worked it out with him. Charles Wood did the best he could with the gravure plates, but due to the structure of the book and the economic factors, it had to be printed a little faster and perhaps in larger signatures. The ink control wasn't too good; if you have four photographs on one sheet you can control the ink better than if you have eight.

Teiser: I remember Wood was experimenting with the gravure plates for your photographs long before the book was in production.

Adams: Well, you see, you can do this: you can take a sheet of paper, and say you're going to print four up. Then, after that's printed you reverse and print the other side, and you control the ink for that side. The books such as My Camera in Yosemite, in the National Parks and Point Lobos are collated books. They are not signature books. You can arrange the plates so that the ink will be of optimum quality for each. Then the sheets are cut up and the pages assembled. Of course, it is quite a job to organize the whole pattern of the book. You have to work it out the right way. Nevertheless, they are all separate images. The titles--printed from rubber type on the back of the reproduction, must relate to the next plate, but that doesn't mean they were printed at the same time.

Illustrating Jeffers and Other Writers

Adams: Now, you had another book, you said.

Teiser: Well, this is quite different. This is the one the Sierra Club did in 1965 on Robinson Jeffers, to which you made some contributions, apparently not only photographs, but also ideas--suggestions based on your knowledge of Jeffers and what he had been and what he had written about. Is that right?

Adams: Not Man Apart. Is that the name of it? Well, that was a very successful Sierra Club book, and there are some beautiful pictures in it.

Teiser: Were you in on the early planning of it?

Adams: No, I really wasn't. I had a very strange feeling about the book because what they did to Jeffers was rather bad in a poetic sense. They just made excerpts from his writings which fitted the ecological dogma. As Mary Austin said, Jeffers was one of the greatest poets since the Greeks, and he was fundamentally a humanist. A lot of people think him a pessimist, and he probably was. But Not Man Apart does not give an adequate impression of Jeffers's poetry at all. It is the "excerpt principle," which is I think not valid ethically and aesthetically. And then I think many of the photographs did not take full advantage of the photography that existed. But at that time [David] Brower was very anxious to get a lot of books out. We were hitting and missing. I had a few photographs in Not Man Apart. I suggested some others using more of Weston's and some other people that I knew, but there just wasn't enough time to really do a proper job. But it's been a very successful and beautiful book.

It just bothers me that poetic statements were taken out of context. If they'd done that as an anthology from a lot of poets, it wouldn't have such a meaning, but it gives people the idea of Jeffers's poetry being something very different from what it was.

Teiser: It's a problem illustrating the work of a man, isn't it? You've done texts, like the Muir and the Mary Austin--

Adams: Yes, we took The Land of Little Rain, for instance, and I had a lot of photographs, and I made excerpts from her text, but it related to one theme, and there was nothing in the book that is a real omission.

Teiser: Is it the full text of the book?

Adams: The full text of the book is printed. My excerpts are from that in different sequences. So it isn't as if I had gone through Mary Austin's work and picked out only certain statements. You could take from her novels and from her other books and make statements which would not really relate. The Jeffers excerpts do relate to the country, of course, but they do not fully relate to a greater thing, which is his poetry.

There's been quite a number of editions of Muir, just on the writings--John Muir in the Sierra--and that's wonderful. I mean, there's no end to it. Muir was writing about the Sierra Nevada and that's fine, but Jeffers was writing great epics and these passages

- Adams: occur which are wonderful in themselves. They are all parts of the whole, but when they're picked out, like taking seeds out of a watermelon, it's not fair to Jeffers.
- Teiser: You had known Jeffers for many, many years, hadn't you?
- Adams: Oh yes. Since 1926.
- Teiser: How did you happen to meet him?
- Adams: Through Albert Bender.
- Teiser: And you were friends?
- Adams: Oh yes, great friends. I became very fond of Una Jeffers, and when they were going to England or Ireland she offered their house for us to live in while they were gone. I think it was quite an honor to be asked to come and live in this incredible place, but we were stuck in San Francisco.
- Teiser: Not a Frank Lloyd Wright house!
- Adams: Thank God. He'd designed and built it himself. I don't think the house was entirely practical, but the tower was quite a bit of fantasy. Una would go up there and play the reed organ. And he'd go up in the top and sit. I mean it was a fantasy, and he'd done all of it himself. He brought these boulders up from the ocean shore; it was actually his own construction.
- Teiser: He was a man who apparently attracted people very strongly. I remember William Everson said he couldn't meet him because his admiration for him was so strong. Theodore Lilienthal, who collected his works--
- Adams: He was a warm and close friend. I think Jeffers was a very strange person--very shy, very remote. He had very few intimates. I never could class myself as that at all. We were just very good friends and very welcome at the house, but I never could break through this slightly icy severity. And yet there was something very warm about it at the same time. Una was a very beautiful woman; one of the handsomest people I ever knew, and really was a perfect foil for him. If it hadn't been for her, he'd have just been impossible. He would have been a monk somewhere on the top of Mount Everest.

But it was an interesting episode with Edward Weston and Jeffers. Weston photographed him. They didn't get along. He didn't like Edward's photographs too much. I don't think he liked any photographs. I'm sure he didn't like mine. I think it was more a matter of not being interested in photographs. There was some talk

Adams: of Edward "illustrating" his work, and they both decided against it. Edward was very astute in these matters, and he realized very quickly that it just wasn't the thing to do. I would hesitate to try to do pictures for a Jeffers poem! What I could do would be to do a portfolio of photographs, a sort of homage to Jeffers, which would be my equivalents. But I wouldn't want any of his verse with it. This is a point there. I wouldn't even use a line. It would just have to stand on its own, just like Portfolio One was simply dedicated to Stieglitz, and every photograph in it says something about what I felt about Stieglitz. And nobody knows what it is, and I don't myself, except in terms of the image. But once I started putting phrases and excerpts and lines, then I would have "rigidized" it. (I don't know whether that's a good English word or not.)

What Does a Photograph Do?

Adams: Well, I think the whole problem is--what does a photograph do? You're first seeing an image of something that is external. The lens is like the eye. It gives you the optical image of the world, as it appears on the retina and appears on the film. Then, of course, how you have seen what you've seen, with all the subjective significances, and how you have expanded the image by optical and chemical controls, and what you've done with tonal control of the print, plus the elements of design. The question is: Is it creative art or is it representation? I still think for the majority of people who acquire my photographs, the subject is a very powerful motivation. Now, I hate to say this, but many people wouldn't know the difference between a poor print and a fine print. They would be just as happy. Of course, I would be just as unhappy because that would be a destruction of creative standards. I've had many people yell at me when I start to spot a print. I say, "Wait a minute. You can't take this until I spot it."

"Oh, don't do that, with that little spotting. That's crazy." I said, "But you can't neglect it; I have to clear this thing up." They're not seeing the photographs, you see, they're seeing the scene.

What the nonobjectivist painter is doing is creating the symbolic imagery, which only a relatively few people can accept. To me the Wyeth paintings are no better than the Norman Rockwell paintings; they're a little more subtle in one sense. But a hundred years from now, I think Rockwell will end up as the better draftsman. The "Four Freedoms" series he did for the government has some magnificent drawings. If you just get out of this particular aura

Adams: of fashion. I'm still very hurt when I see Andy Warhol, or somebody of that type, with a six-foot-high picture of a Campbell's soup can, which is a much worse painting than you'd see on a billboard, but the price tag is \$6000 and it's called art. I must confess that I have a "gastrological" upheaval. [Laughter]

And yet, I'm a great admirer of Dali. I think he's delightfully crazy, and he has a beautiful technique. Some of his things are marvelously done. And the only tragedy there is that Dali didn't quite study the physical techniques of the early masters, in trying to imitate their quality, so his paint is cracking and leaving the canvas, and there are sizing problems. But there are some wonderful things.

Teiser: He's very logical, isn't he?

Adams: Just about as logical as--what is the painter?--you know, with weird demons, and the imps with funnels on their heads--the German painter.*

Teiser: I was wondering if you liked Edward Hopper?

Adams: Oh, very much as a painter. I don't like his world, but I like his painting. That's an interesting statement, you see. If the artist is powerful enough as an artist, you can thoroughly dislike his world, but still admire his art. And when the artist doesn't quite hit it, then the world dominates.

To me, I get a great emotional reaction out of John Marin, O'Keeffe, Marsden Hartley, and Burchfield. Remember his painting, "Hot September Wind"? One of the few of the Wyeths that I like is the wind blowing the curtain at the window. The thing has a certain magic in it, but you just can't verbalize about it.

Conflicts and Friendships

Teiser: I have another question. We've just been going over all the things we've talked about. You have mentioned at various times, and I guess I've read maybe in Mrs. Newhall's writings, that there were conflicts among Stieglitz, Steichen, and Beaumont Newhall that were somehow straightened out with your help and Mrs. Newhall's help--everybody's help. Is that too broad a statement?

Adams: Well, it's fairly broad. I guess I was responsible for bringing Stieglitz and the Newhalls together. Now, historically I can't give you the exact fact; Stieglitz liked Nancy but he automatically distrusted Newhall because he was a "man from the museum." He fundamentally distrusted the museum. When he got to know Newhall personally, he was really very fine to him.

*Bosch.

Adams: There was a strange relationship between Steichen and Stieglitz which I'm afraid you'll have to go to Newhall--an historian--to clarify. Steichen had begun as a painter in Europe and was dabbling in photography. He was meeting with many contemporary artists in Europe. He would send their work over to Stieglitz. Stieglitz would say, "Fine, send me more and I'll give them a show." Stieglitz is credited with bringing contemporary art, some of the biggest names, as well as African sculpture, to this country. It is really due, to a very great extent, to Steichen's discovery and sending them to Stieglitz. And while I'm no admirer of Steichen in many directions, it still is one of the top achievements. He really did a great thing for American art. The Museum of Modern Art, of course, had no interest in photography and, according to Stieglitz, no fundamental taste or selection. It was just a bunch of very rich people who indulged themselves in--I forget what he called it; probably wasn't very polite. So anybody from there was suspect. I remember he wrote me a letter: "Yes, and the man from the museum came today. I told him what I felt about the whole situation and didn't get anywhere much." Words to that effect. But after realizing that Newhall was fundamentally completely sincere and dedicated, Stieglitz was very agreeable [about Newhall's department in the museum].

O'Keeffe and the Newhalls never got along very well. That's something that you'll have to get from Nancy. I think it's always a matter of jealousy--Dorothy Norman and Georgia O'Keeffe--the women in Stieglitz's life--magnified I think to quite an impossible level.

I think I shouldn't tread in this field because this is something which is historic and which you ought to get from the Newhalls. I'm just telling you what I mean. I'm just saying that I don't know enough to make it significant in any way.

Marin we were all terribly fond of. I think he was a great artist, one of America's greatest painters. At least for me--I get a great charge out of his paintings. When I get a charge, I get a charge, and it isn't a manufactured one!

And O'Keeffe is marvelous. We've always been very good friends. I was very good friends, as you know, with Edward and Brett Weston. Anton Bruehl and--I can't think of all of them now. I guess the only one that I never warmed up to, to any extent, was Steichen, and I was thinking about it the other night. I just can't put my finger on it, except that it was one of these strange things called personal chemistry. And it isn't a matter of disliking, because he was a very charming and extremely intelligent, capable man, but it's just a negative situation--oil and water don't mix, and we haven't found the detergent yet that would do it.

Adams: And yet I had every reason to be mad as blazes at Stieglitz because of his rudeness and sometimes even brutal attitude towards things, but there was always a fundamental honesty which seemed to make him plausible. I don't think it's because he liked my work or even accepted it. I think that Steichen represented in photography the commercial advertising psychology, supported by people like Tom Maloney, who was really a wonderful generous Irishman. But they represented a world which I don't agree with, and I think that probably would be the answer--that their world is antithetic, so I never could make the hurdle.

As I say, I got along very well with the Morgans, Willard and Barbara; they're marvelous people. We're continuing that in new generations. In fact, I've had very few squabbles with my colleagues. Much fewer squabbles than most of my colleagues have had with their colleagues. [Laughter]

There have been some very strange things in photography--kind of hard feelings. Charles Sheeler, for instance, did a whole series of shots of the Ford plant at Detroit, and I think it was Fortune or some magazine that wanted to use them, and of course, being a great artist, he had a certain high price on them. So they sent Margaret Bourke-White to do the same thing. She didn't know Sheeler's work. She was a very fine person. She never would have jumped the gun, so to speak. But Charles never forgave her or the concern that did it, because he thought that she just pirated his stuff. She didn't, but you couldn't tell him. These things get very complex!

Again, that's something for the historian to elaborate on or correct. Charles Sheeler was a great and really dedicated person and extremely close to Steichen, which of course made our relationship always a little bit touchy, because he'd try to--what is the term that you use?--convert me. And I wasn't convertible. [Laughter] I was a sedan. [Laughter]

Well, I hope that this zany recording on my part has been of some help to you.

More problems? I'm delighted to talk on.

Teiser: We have a few more, and we'll bring them back tomorrow.

Adams: That's fine.

[End Tape 22, Side 2]

[Begin Tape 23, Side 1]
 [Interview XIX -- 15 July 1972]

Teiser: Would you say again, for the tape, the poem about the dark slide?

Adams: Well, it was this thing about this photographer. He wasn't very successful, so his epitaph was: "A failure he lived and a failure he died. He never remembered to pull the slide." [Laughter]

And Alfred Stieglitz's epitaph. I was able to get him a beautiful Zeiss lens, and he looked at it and said, "This is my tombstone." I said, "You're not going to use the lens for that! But what are you going to have on your tombstone?" He said, "All I want is this: 'Here lies Alfred Stieglitz. He lived for better or for worse, but he's dead for good'." [Laughter]

More on Reproduction Rights

Teiser: I asked you, before we started taping, about the Magnum agency.

Adams: Yes, Magnum is a group of photographers of very top names, including Cartier-Bresson in Europe. They had a Paris office and a New York office. They were primarily oriented to journalism. I don't know why they wanted me in it, but they nevertheless do sell a certain number of what they call "pictorials." I just did one job with them which still has to be resolved. But not being a journalist, I really didn't have much function in that group. It's still going, and I guess it's doing well. They take usually a 50 percent commission, but they make a real sales effort, which is fair enough. A dealer gets usually 40 percent, but an agent has to scramble around much more. Well, 50 percent is better than nothing. This is not 50 percent of sales of prints, but 50 percent commission on the fee charged. They set the fee with that in mind.

Teiser: And these are all photographs for reproduction, are they?

Adams: Usually just sold to magazines and journals.

Teiser: Then I think you said you belonged to the--

Adams: The American Society of Magazine Photographers, called ASMP, which now has some very long secondary title--[the Society of] Photographers in Communication or something, which is silly because everybody knows what it is. But this was started many years ago as a sort of professional society. I joined with the idea and hope that it would remain a professional group, like the American College of Surgeons

Adams: or the Institute of Architects or Engineers, where there's a high professional level. Well, seeing that most photographers are not of high professional level, it turned into a union which was really into almost a price-fixing situation. There were constant squabbles over what a fee represents--one use? multiple use? who owns the negative? who owns the color transparency? are you paid to do the job? And does the magazine use it as they wish, or do they have to pay you for every separate use? And all this stuff. It gets frankly very boring because professionally you do a job and naturally expect the client to do what he wants with it. Providing it's dignified and doesn't hurt your reputation, the more he can get out of it the better, if the photographer's paid adequately for it at first.

But the photographers wanted, at one time, 10 percent of the total charge of the advertising; and of course that would be impossible because the total cost of advertising--page rates and so on--are so great. The thing that people don't realize is that the advertising agency gets 15 percent over cost, and that's all it gets in commission from the client. But that means that overhead has to come out of that, you see. In other words, an agency will bill the client for the photograph, for the art work, for all the printing, for the plates--all the expenses involved in making the photograph. Say this bill comes to \$10,000, they may bill \$11,500. But out of that \$11,500 they have to keep their office going, so advertising isn't all gravy. It's pretty tight.

Suppose that somebody has a campaign. I just did one for the Wolverine people--boots. I gave them a set of photographs, got a very nice fee for it (comes in a monthly stipend). It was so successful they want to do it again next year, which is fine. They put out a brochure. Did I give you one of those?

Teiser: No.

Adams: Oh, I'll give you one. It's a very nice little thing. And they're running full-page advertisements in Life. I think they've run three, black and white. Well, the cost of Life pages is so much greater than the cost of the photographs, but that doesn't really excuse meager payment to the photographer.

Playboy, the last I heard, was \$45,000 a page, an inside color page. That cost is for one issue. Polaroid spends \$20 million to \$25 million a year in TV and advertising, which is a set percentage of their gross sales.

Teiser: Polaroid's advertising has such a wide range, from Aperture to the Sunday paper and radio and television--

Adams: Oh yes. The point is entirely a matter of readership--how many people see the ad. A certain percentage of those are going to respond. That pays for the ad and makes a profit. They've got it down to a cold-blooded mathematical fact.

Teiser: But most companies don't advertise to such a very wide range. They figure "most of our buyers are here," in one or two categories.

Adams: Well, that's specific. That's a different thing. There is one very important point: William Edwin Rudge told me that if you do a book, no matter what the book is, if you send out a mailing list of a hundred thousand names, you will get a minimum of two thousand responses. That's part of the whole advertising promotion pattern. But people forget what it costs to send out a hundred thousand ads, you see. Your printing and postage alone is an absolute minimum of 10¢ apiece; a hundred thousand would be \$10,000. Now, suppose you get two thousand orders, and you make \$2, at the most, on the book; that's only \$4000. But the minimum advertising cost is ten.

But the photographer working with the dealer (now Lee Witkin in New York is my agent there and Carl Siembab in Boston, and 831 Gallery near Detroit, and the Focus Gallery in San Francisco)--they work on another basis. They show prints at an exhibit, and they have prints on hand and they sell them, almost always on a 40 percent commission basis, like a book. The average of the book sales profit was about 5 1/2 percent seven years ago. The publisher's profit was a little bit higher, nearly 6 percent. So you see it is a very close thing.

If I just wanted to sell my photographs myself, I could get a big mailing list, and I could announce portfolios, and I imagine I could sell a great deal directly. But the cost of doing it would still be a minimum of 25 percent, because I'd have to hire somebody to help. I'm not going to write all those letters. So the direct sale may be an illusion too.

A painter is in a little different situation. O'Keeffe has given up any gallery. She just lives in New Mexico and paints. People come and write or ask for appointments to see her, and they'll consider the matter for two or three months, and finally they'll like a painting and, "Well, all right," she will condescend to sell them a painting. And a painting is \$15,000 to \$50,000 so you know she does not have to do many in a year! That's a little different world, because your production effort is way down (and your fame way up!).

But the whole idea of associations and groups and sales, it sounds commercial for somebody who's supposed to be an artist, but still, these are the realities. And a great many very fine artists

Adams: in photography are having a terrible time because they don't face the reality of just the cost of getting their work out to the people. Edward Weston nearly starved to death. You know, he never made any money at all. He was doing very well when he was a portrait photographer in Glendale in the 1920s, but when he gave up that work and went into purely creative work, he had a very tough time most of his life. And it was so stupid, because getting the right agent, Edward could have made quite a little bit of money and been comfortable. I don't say he'd have been or wanted to be rich.

Teiser: He was just against the idea?

Adams: He was against the idea, but not on a very logical basis. For him "business" was associated with prostitution. I always used to kid him. I said, "Are you really against prostitution, or maybe you don't like prostitution because it reminds you of business."
[Laughter]

Teiser: Would you tell again about your gold pagoda?

Adams: Oh, the gold pagoda. I often get honors and awards and things. I got the progress medal from PSA. But before that, Nikon, the Japanese camera company, gave an achievement award, and they picked me out and I got my temple [laughter], which is a very nice model. It's a trophy. Of course, it's much better than the average golf trophy you see on businessmen's desks. Nothing in the world is designed more terribly than the average trophy. Anyway, the temple is very nice.

I think I also mentioned something about the trials of working on Life special assignments. I did a big story on begonias-- worked for months on a sixteen-page color insert. And it really came out very beautifully. It's a very difficult thing to photograph begonias in a greenhouse because you have to control the color sensitivity of the film, that is, control the light with filters. And these were 8 by 10s, some of them really pretty spectacular-- and the people at Life were crazy about it. Everything was fine, and I understand they printed it all; then something happened and it wasn't used. They finally redid several pages in color and a small text, but the main section was printed and then discarded because there wasn't economic space for it. And this is a continuing editorial burden which I think we have to face in journalism. If a budget has so much money for pictures and printing and they just spend it, they don't worry about it. If they do something and it costs them \$25,000 or \$50,000 or \$100,000 and something comes up that's more important, they just junk it.

Teiser: Yes, in a news magazine it must be--

Adams: Yes, perplexing. And covers. Time will have several covers prepared relating to impending events. Then they'll pick the appropriate cover. And the artist is paid a fee and then gets so much for the cover in addition to the fee if it's used. But I think Time at one time had five covers holding for a couple of weeks--the election, the war, etc. And they have to be all ready. These things are commissioned, and when they're out of date, they're just discarded.

Teiser: You said that now Bill Turnage has been getting you so much work that you can't do it all.

Adams: Yes. Turnage is really doing extremely well by me, but he's doing a little bit more than I can handle. I have to watch things very carefully. Because now today I was doing some printing for the San Francisco show. I really am tired at the end of the day, and I think I made only four prints--four or five prints of each, while I am at it.

Teiser: How many hours in the darkroom does that represent?

Adams: Oh, that's about six in the darkroom. But I mean four separate subjects; when I once get the good print, then I make four or five copies so I have them for other exhibits too. But a couple of them usually have to be done over.

Sometimes things go extremely fast. The other day I was making big prints, and it went very fine. The day before that I had real trouble. Then you have what is called a "dirty negative"--the negative has been damaged or gone through a fire, etc. With an 8 by 10 print it's fine; get them up to 16 by 20 and you begin to see all the little defects, which have to be very carefully spotted.

Darkrooms

Teiser: You're going to take us on a tour of your darkroom--

Adams: I could probably preface it a little bit by the history of my darkrooms. I had a little darkroom in the family house, a room that the Chinese cook used to occupy. We cut a hole in the wall and I had a daylight enlarger--an old 8 by 10 camera with enlarging film holder, and outside was a great big aluminum reflector that pointed up to the sky, and a diffusing screen. And it really was beautiful light; daylight's handsome enlarging light. But unfortunately San Francisco has a variation of weather, and the fog would come in and my exposure would drop down terrifically, or the sun would hit the

Adams: reflector and I'd be in trouble. Then early in the day and late in the afternoon the exposure changes, so I had no set exposure at all. All the Taos book [Taos Pueblo] enlargements were made in daylight. Which is a thing that I think I hadn't mentioned before; I remember that. And I'd work after 10:00 a.m.--10:00 to 3:00. I loved a nice consistent heavy foggy day because it stayed at the same light value. But storm days and sunny days with the sun coming through trees and fog and producing changing light were pretty bad.

Well, then I got an enlarger with two Cooper-Hewitt M tubes in it. Used the same enlarger but added the light. And I guess the electrician didn't know what he was doing, because the tubes resonated in phase and would break. Then I had to wipe up mercury all over the place. Why I didn't die of mercury poisoning I don't know. I must have gone through eight M tubes. The tubes are rather widely separated. We put one tube back of the other, but they "resonated." Then I had a mercury-argon 5-millimeter tube in a big fourteen-inch grid, and a twenty-thousand-volt transformer. That was simply marvelous light. I used that for many, many years.

Then when I came down here, I decided I'd go to tungsten light. You can see the enlarger with thirty-six lamps in it, each one on a switch. So now I have an enlarging-light control that I didn't have before. I can dodge now directly. Also, this light is very fast. The other one wasn't too fast.

Teiser: That's the principle that used to be used in contact printers?

Adams: Yes, with contact printing we turn on and off lights in the box. I turn on and off the enlarging lights at the back of the enlarger.

Teiser: Was this your own invention?

Adams: Not an invention. It's just an adaptation of a principle.

Teiser: Has anyone ever had an enlarger like that before?

Adams: Not that I know of. That's very funny; I don't know of one. There's no reason why there shouldn't be. The point is to cross-wire, so that if you look at the sky in the upper right hand of the negative, and wish to give it less light, you operate the light switch which is in the upper right-hand area of the panel. If your lights are cross-wired, you then operate the light in the lower left area. Sometimes I'll have sixteen lights off.

Well, after the little darkroom I invaded the family basement and built a darkroom about twenty-eight feet long (it's just about the same as this one in Carmel) and had vertical tracks for the big enlarger. I made big prints--a lot of big images for Yosemite--

Adams: using big wooden trays. Used to develop by laying them out flat. Now we develop them by rolling in deep narrow trays.

Teiser: Did you use gallons of black substance called Probus paint?

Adams: That's what we used, but that is pretty bad photographically; it will cause fog. Now I use fiberglass. Of course, nothing's better than stainless steel. It costs two or three times as much in the beginning, but it lasts forever. I wish I'd had all my sinks done in stainless steel. That would have cost something like \$700. Now I've spent \$300 just getting the present sinks repainted and fixed up, and that will happen again in a few years. So stainless steel would have been the best choice.

When they first came out with metal tanks, etc., they had monel metal, which preceded stainless. Then they had ordinary stainless, and that doesn't react well with some photographic acids, so they made what they call the 818 type. Now there's a new one that's even a little more resistant to stain. The Calumet Corporation makes marvelous sets of tanks and trays and equipment--beautiful steel. It's not cheap but it's certainly top stuff.

When I moved down here, Mr. [Adolph] Gasser came from San Francisco and laid the rails for the enlarger and set them to a high degree of accuracy with a theodolite. You know how that is used, for getting elevations. You lay down a track, and then start with one end and put a mark on a post. Then you move the post down the rail; if it sags, you support and then secure the rail, getting exactly the same height over all. It's about the only way in which you can get such things really right. You can with a level, I presume, but it would be rather tricky.

Before coming down here from San Francisco, I had the difficult problem of keeping my negatives in the vault of the Bank of California, because the house wasn't fireproof. So when I'd start to print I'd have to go downtown to the bank, get into the safe deposit, get into the storeroom, pick out the negatives, come home, find I'd forgotten one, go back again! It wasn't too expensive--about \$40 a month for storage and service--and the negatives were safe.

So then, part of the plan of this house included a fireproof vault. We have one that's built right into the rock. It is really a bomb-shelter design--ten inches of thick concrete. If there's a big fire and the house should burn, the vault would still be cool. But anything can burn that's wood, and it's not right to have negatives as prize possessions in a frame house.

I have, for me, an extremely efficient darkroom. It's bigger than I would have if I didn't make large prints.

Teiser: You also have an adjacent room with finishing equipment in it, a room between the darkroom and the gallery room.

Adams: Well, the original design of the house was that this darkroom would lead into that workroom, which is for mounting and densitometers--you know, the general area. Then there's "pass-through" storage, which is back of those black doors in the gallery; it leads into the workroom. Theoretically, you can pass things through to the gallery across those four-foot shelves. They lead right into the workroom. I'm the only thing--and the cat--that's ever really passed through. But anyway, the principle is there. That and the garage and the study space and the vault is about half the space of the house and can be written off professionally as such. Has been so far.

Darkroom Tour

[Darkroom tour follows. Taped while walking through the work areas.]

Adams: Well, if you want to go in the darkroom first, I can describe some of its points. The average darkroom, of course, should be air conditioned, but in this climate, we don't need it. We have fans. The sound you're probably getting now [on the tape] is the drum washer, washing the smaller prints. And they're about ready to come out--a second batch.

This is the big enlarger, and it has, of course, a cooler--blower--which is terribly important because the amount of heat without heat-absorbing glass is very high. I use 130-volt lamps. Ordinary 115-volt lamps would wear out much quicker when the power is increased. We use a 24-inch Goerz Artar Tessar lens for most enlarging. The enlarger moves on a track, by hand power, but the magnetic easel (the paper is held on with magnets) is motorized. My friend made me a metal strip guide for the big prints. I can place the pipe at several levels, put the roll on it, pull the paper down to the desired length, and secure it with big magnets at the bottom. Then I just set the guide across the top under the roll and cut right across.

Teiser: That's a straight-edge?

Adams: Yes. Well, it's a T-square straight-edge, and it has an edge guide.

This other enlarger is very fine; it has a very special and remarkable light called the Code Light, made by the Ferrante brothers in Los Angeles. I use it for variable contrast paper. There are two

Adams: tubes--one is for soft contrast, and the other for hard. When we use the green light only we simulate a soft, number one paper. With the same amount of green and blue light, the soft and hard get a number two paper contrast. With the blue light only we get a number four paper contrast. So you have an infinite variation of contrasts using these two dials.

And then we have a third, hard light to use only for graded paper. The graded paper is not sensitive to the green light. This enlarger can be turned horizontally and project on to the large vertical easel, making possible big prints from small negatives. I use a ten-inch process lens for that as a rule. The longer the focal length used, the straighter the rays and the more sharpness you get from small negatives.

Teiser: The source of this Code Light is above the negative?

Adams: Yes. And the substance in the tubes puts out light of the same color, independent of the intensity of light going through it. The grid (this is built with a special head) is a little larger than usual, and completely covers the negative. And of course the enlarger moves up and down by motor. The transformers are in the console.

My friend Dick Julian made me a metronome; you see, it's an electronic timer. I don't have a voltage-control machine because it would have to be very large for the big enlarger, also would be very expensive. But this timer is a computer: as the voltage drops, the intervals increase; as the voltage rises, the intervals shorten. If I want a ten-second exposure, I just count ten. Sometimes the "second" may be a second and a quarter, or maybe even less--it varies according to the amount of voltage. The intensity of the light changes least with the fluorescent tubes, and greater with tungsten lamps in the 8 by 10 enlarger.

And this device is a "target." (I'll turn it on for you.) Each one of those illuminated squares is one zone apart, or is twice as bright as the one below it. So, in photographing that, I get four exposure zones at once. I can photograph Zones I, II, III, IV. Then I can take another picture--Zones IV, V, VI, VII, or VII, VIII, IX, X--overlaps show any discrepancies in the shutter. It takes a little while for this target to heat up and reach standard intensity.

Teiser: You use that for--?

Adams: Testing film. Find out what the film speed is and what the threshold is and what optimum development times will be. When I get a new film I must find out many things. "If I expose on Zone IV, how much more development do I have to give to get density five?" The Zone System controls help me in field work.

Adams: The rest of the darkroom is very simple; any normal good black and white darkroom would be like this. Color labs are much more complex.

My friend also made me this electronic counter, which, as you notice when I press this button, goes right back to 0 and begins to count seconds.

Teiser: The digits are lighted in red so that they don't--

Adams: Well, I can get it up quite bright when printing, or when I'm doing film in the dark I can bring it down to very low intensity. There isn't any fog danger--it pushes back on the shelf out of sight. It's an extremely handy device. It just keeps going; it doesn't do anything special. But this is the most convenient and handy thing I can imagine. I can use it in any operation.

Teiser: That's made by the same fellow who made the metronome computer?

Adams: Yes. He's a fine photographer, and an electronic engineer with Hughes Corporation.

The big sinks are used for--this one especially--for laying out the big enlargements to look at. All that equipment (washers, etc.) comes out.

Teiser: You mentioned, I think, the largest size paper you can handle.

Adams: Oh, I can go up to seventy-eight inches in length, with a forty-inch roll.

Then the drying racks--plastic screens are very practical. Every once in a while, when it's a warm day, we take them out and hose them off to assure chemical cleanness.

This is one of the photographs I was doing today--a 1929 eagle dance. It's for the new Southwest book.

Teiser: How wonderful.

Adams: It still has a certain "feeling."

Oh, I might say that the darkroom is completely controlled by this one switch, and it's on a relay. You can hear it--7500 watts in there, and I have to have a big positive switch for safety.

Teiser: No more fires. We're now in the workroom.

Adams: This is a big dry mounting press, mounting prints by heat. And this is the tacking iron, a little device to tack the tissue to the mount. And this is really a printer's trimmer, which is a very accurate

Adams: one--important because a lot of photographic trimmers aren't really good and don't cut a clean edge.

Then I have two densitometers. This is a reflection densitometer that measures the reflection density of prints, the scale from black to white. This is the probe, and you just put this on the print and depress it, and this gives you the percentage of reflection, or the reflection density on the dial.

And this is the diffuse transmission densitometer, with the read-out numbers. These are read-out numbers like the darkroom timer, so when you depress it gently on the negative the density shows in digital log numbers. This is a very valuable device. This is where you measure the densities of your negative. Density is usually given in \log_{10} values. It's just a convention; it could be arithmetic, but it's always been put in terms of logs: 0.0 is 1, 1.0 is 10, 2.0 is 100, etc. You have to get used to that sequence.

Teiser: These are shelves on the wall that separates this room from the gallery.

Adams: Yes. There's no pass-through here, there's just my paper. I have to have a lot of paper on hand, because I never know what I'm going to use. It looks like an imposing stock, but it's better to have more than less when you really need it.

And then there's the Polaroid MP3 copy camera, a very handy device.

So I can do a lot of work here. Then there's this garage, which we now use for packing--no cars any more--storage and stuff. It may be an office some day. Then what is known as a study, which is in even greater shambles than usual. And this leads outside and you can see the negative storage vault out there. It's just a concrete cube--mostly filled with metal cases with negatives in them.

So, you see, the circulation is such that we can really get a lot of work done. But at the moment I'm trying to get things set so it will all be clean and neat by tomorrow when we leave.

Now, the negative catalogues--for instance, this is [the catalogue for] the Yosemite book. This isn't the original but a duplicate. Well, I've got them all filed in a code. For instance, you have Yosemite, and 1Y would be an 8 by 10 of Yosemite--"1" meaning 8 by 10, "Y" meaning Yosemite. "3" is 5 by 7; "4" is 4 by 5; "5" is 3 1/4 by 4 1/4; "6" is Hasselblad size, 2 1/4 by 2 1/4, etc.

Teiser: Is this a system you established long ago and have kept in use?

Adams: Yes. They're not cross-referenced. They have to be cross-referenced some time, however.

Teiser: Here on your study wall are many, many awards.

Adams: Well, this is what we call "professional wall paper."

Teiser: Very impressive.

Adams: Well, they gave me a special citation from the American Institute of Architects that I went to Detroit for. And then the Northern California chapter [of the AIA]. Then I had--oh, Fred Farr got me a senate resolution. And the membership scroll from the American Academy of Arts and Sciences. And--I don't remember all of them--Governor Brown had some special citation. Stuart Udall gave me the Conservation Award. I have the John Muir Award from the Sierra Club. And five honorary degrees--that should be enough!

The gallery--the black wall is primarily to cut glare, because when we're spotting or working here, we don't get any reflections from black walls. The gray wall is a 20 percent gray, and the panels are about 12 percent. Now, the total environmental reflection, if you stand and look at the pictures, would be about 20 percent. And the pictures should look their optimum value. If the room were white, the pictures would look too dark; if the room were dark like that black wall, the pictures would look too bright. In other words, if you put a picture against this black wall, you get a totally different emotional effect from it.

Teiser: What about the mounts?

Adams: Well, the mounts balance out, you see. The mounts in the darker panels strike a sort of approximate balance, so the whole environment remains about 20, 18 percent, actually, the geometric mean of photographic reflection density values. That is, the reflection density range of the print which is, say, 0.08 up to about 2.0 +, and the geometric mean is about 0.7 or value 5. The eye seems to respond logically to that. It doesn't make much difference what color you use, providing it's about of that value. You could have greens or blues, reds--I wouldn't like too much color for myself. When you have very brilliant colors on the wall, like those yellow boxes, for instance, it's terrible. A lot of people do that to walls, and photographs look awful on them.

Well, I don't think there's anything else. A lot of people think the darkroom is super-elaborate, but it really isn't. If I were doing color photography, I would be trapped with more complicated processing stuff, like nitrogen bursts for agitation, and all kinds of printing controls. Thank goodness I'm not doing color!

Teiser: I think you mentioned on another tape, but let's put it on this, that there's humidity control in the negative storage building.

Adams: Oh yes. Film, if kept in high humidity conditions, may become hygroscopic and absorb moisture, and any adhesive in the envelopes may cause trouble. A lot of Edward Weston's pictures had a blue streak down the back--stained, from what they call the "hygroscopic" effect from the center-line glue on the envelope.

Then in high humidity, plus heat, you have fungus problems. If you keep your humidity between 40 and 50, that's normal and that's about the best for film. If you go lower than that, the film gets brittle, and it's especially true with movie film. (They found to their sorrow if they had a very low humidity, the film would just break.) So the temperature in my vault runs rarely up to 70, never gets more in hot weather, and the humidity holds around 45 percent.

Teiser: Is there an alarm system on your dehumidifier?

Adams: No, it will just stop when the humidity reaches the optimum. The humidity here isn't extreme. The Westons keep all their father's negatives and their own without humidity control, but I still wouldn't--especially with older film, nitrate base.

You see, nitrate base is really a form of nitroglycerin. When it becomes soggy, absorbs water, it can become really very dangerous. That's the reason for the great tragedy that happened at the Cleveland Clinic x-ray department--the film burned with a near explosion. Kodak came out in the 1940s with what I believe is called acetate base--well, it'll burn, but only if you put it in the fireplace and stoke it. Then they have the new film material called "Estar," which is a plastic of very high dimensional stability, giving very little film shrinkage. Some of my old 8 by 10s are a quarter inch less in dimension on each side; they've just shrunk! The older films are extremely inflammable. In other words, if I were to light a match to one it would go up with a "poof." But they're kept in separate envelopes, in folders, and there's no danger. If I had a bad fire in the vault and a lot of heat, they probably would go. But there are not many of them.

There was a very nice woman here in Carmel--Mrs. Valeceritos--who'd do quite fantastic things. She'd make a photograph of a natural shape, or sculpture, and then she would subject her negative to hot water. The gelatin would flow, and she'd develop these rather fantastic patterns. And she really controlled it very beautifully. Then the new films came out with synthetic gelatin, etc., that doesn't melt, and she couldn't get them to flow!

Teiser: I wonder how many art forms are lost because of such accidents of fate.

Adams: That was really quite a blow to her.

Harroun: About how many negatives do you have in the vault?

Adams: Oh, it's somewhere between twenty-seven and thirty thousand. A lot that aren't catalogued and a lot that relate just to historical values. A lot that probably relate to trials and tests. One-half of them probably have no real value. Then there's a certain number that have very considerable historic value, especially the way the Sierra looked fifty years ago. And then there's the creative work, which is something else. But, it's surprising what you collect over the years, and what you keep. You don't want to throw anything away!

The other day I went through a lot of stuff and threw away two big wastepaper baskets full of old negatives and tests and things that have no possible value to anybody. Like an old commercial job or something, such as a picture of a shirt!

My first commercial job was the Boudin Bakery, of which I took the interior. It was a very nice little architectural design. Then I rephotographed the sign over it. It's double-exposure, very European, very modern in 1931. I kept that, because that has both creative and historic value.

Formulas and Procedures

Teiser: We're continuing now after having completed the darkroom tour.

Are there any other things that you think of now that you feel we should have discussed?

Adams: No, I don't think so. I think the basis of my work, of course, is a maximum of simplicity. I mean, I don't use any more systems or methods than I have to. At present I'm using Kodak HC 110 developer for the negatives and Dektol for the prints. Occasionally I use for prints what is known as Selectol Soft, which is really a surface developer and can be made up from Ansco 120, or Beers A formula, which is just Metol sodium sulphite and sodium carbonate. A lot of people have worshiped Amidol; I never can use it. It's too potent a developer for the type of papers we have now.

Adams: There's always a discussion about negative developers. You know, everybody has their pets. But it's surprising how similar most of them are. Then I use always a weak acid short stop between developer and fixing bath, and I prefer Kodak's F6 fixing bath formula, which contains a buffer, a balanced alkali which cuts down the smell of the acid a great deal. It keeps the fixing solution at a consistent acid pH.

I don't use quick fix; I don't like it. It's not necessary, and I think it's harmful, because it has very potent action. If you're doing "fast" stuff, as they say, you might save a minute. So what?

All my fine prints are toned. They're first given a second hypo bath, then they go into a hypo-clearing solution with selenium, then into a plain hypo-clearing solution, and then a rinse and wash. It's really very archival. The prints should last forever.

The prints you saw washing in there now are not toned, they've just had the first fixing. But they will be thoroughly washed and dried, and in about two or three weeks I'll be able to tone them.

Teiser: Is it necessary to wait that long?

Adams: No, but I have no way to do it now. It takes too long. I'd rather look at them and figure out, "Did I do it right, or didn't I?" and throw away the ones that aren't right, because some are pretty complicated. And then tone the best ones?

Teiser: I was reading an article on Paul Strand which said that sometimes he used gold toner and sometimes he used selenium toner, and he didn't know why he used which.

Adams: Well, Ansco once put out Flemish gold toner, which is nothing but a selenium formula. A real gold toner like the Kodak gold protective solution gives a bluish cast. It makes the prints very permanent. And then there's the Nelson gold toner, which is really a silver nitrate formula. And the ordinary sulphide toners, where you bleach out the silver and reconstitute it in silver sulphide, giving what I call "the egg yolk sepia," the ordinary brown tone that you see--rather ghastly. Then there's the Kodak brown toner and the poly toner. Selenium seems to be the best. It gives a cool color, not a yellow sulphide tone. No matter whether the print shows the color or not, if it's subjected to a selenium toner it does have permanency. I mount my fine prints with dry mounting on rag boards. Then we spot them--inevitable, because of all the dust specks and the physical defects that occur.

Teiser: Do you tone prints for reproduction?

Adams: No. Only for permanency. In fact, it adds to the density. Well, I made some pictures the other day of a Clarence Kennedy negative I'm going to make for reproduction, and I sent them to the engraver, and I said, "Now, the color is slightly warm, and I can correct this by putting it through a gold toner--gold protective solution, to be exact." But the trouble is, it would increase the density; it would make the blacks blacker--a richer tone. And that would probably take it beyond the range of the engraving film. So he said, "No. It's perfect the way it is. Leave it alone."

The whole process of reproduction is to get a print that does not exceed the exposure range, if you want to use that term, of the reproducing materials. You see, if you have a print--the average bright print that we make today up to 2.0 density range--you can't hold it in the engraving film. The blacks or the whites are going to suffer. The two-plate offset printing system does give you a little more range. One overlaps the other in favor of the whites and blacks. But still, you have to keep your print down to not more than 1.5 density range. Whereas, the prints you look at could be 2.0 and higher. 1.5 would be roughly one to thirty-five arithmetic; 1.7 represents around 50 percent.

Teiser: Will you have good control over the reproduction of the plates in the second volume of The Eloquent Light?

Adams: It all depends who prints it. If it's to be printed by Rappaport in the East, or George Waters out here, I won't worry at all. If it's printed by somebody that doesn't know me, and I don't know them, all kinds of things could happen.

Teiser: I suppose the choice of the printer partly depends upon the economics of the situation.

Adams: That's the trouble. It isn't so much the printer as the economics! Here we have a book of so many pages and in such a size, and you can't spend more than \$2 on it because it should be a \$10 book, or you can't spend more than \$5 because it's going to be a \$25 book. Then, what can you do with two hundred pages in this format? And you'd like to have two-plate offset with varnish. Chances are you can't. Raise it to \$6.50, then you have to multiply that by five, so there you have a \$35 book. And so it goes!

Teiser: Were you satisfied with the reproduction of volume one?

Adams: Fair. I think today they can do much better with the offset.

Teiser: You were discussing the possibility of paperback editions. If you reduce the size, would it be adequate?

Adams: Well, what happens is very interesting. You take [Eliot] Porter's book by Thoreau, In Wildness, and that was reduced--directly from the original color separations. They reduced the screen to about 350 lines per inch, and got a quite beautiful effect with offset. You couldn't possibly do that with the letterpress process.

So in setting up my book, we're going to keep this in mind, as we'll probably reduce it down to three-fifths or two-thirds original size. And that means, then, that we can't have tiny footnotes in the text because they would become unreadable. If you have to change that, that means stripping in another type block. It can throw the book out of balance. So it's much better to design it for size ahead of time. Although This is the American Earth and the Wildness book and others have really come out very well by direct reproduction. But that could not be done any other way but offset, because if you're going to reproduce half-tone like that, your metal dots would be so weak they could not hold up. They are like a little mushroom on a stem, you see, and you get down to a delicate spider web of metal, and it wouldn't work in the press.

[End Tape 23, Side 2]

Early Aesthetic Impact of Yosemite

[Interview XX (Sierra Club Interview I) -- 16 July 1972]
 [Begin Tape 24, Side 1]

Adams: I was very young--fourteen--when I went to Yosemite. The idea of conservation had never entered my head. I knew about John Muir and I remember reading about his death in 1914, I think it was, before Christmas. I remember the headline in the paper, "John Muir Dies," and to me he was a naturalist and a writer. But conservation as such--developments in environmentalism and ecology--was absolutely an unknown quantity.

My father came home from Washington one time and saw that they had cleaned out all those beautiful little oak trees in Lobos Creek, in San Francisco. It was a great loss, and we were all upset about it. He was very much upset about it. And this was a real sense of loss. But, you see, at that time there was so much wilderness and so many wild places that it wasn't as it is today. The Hutchings book, In the Heart of the Sierra, was a very intriguing guidebook and showed a lot of wonders and curiosities.

Now, the National Park Service was really established with the setting aside of Yellowstone--I think pretty much on the curiosity--curio--attitude. In other words, it didn't have any of the quality of Wordsworth's nature adoration, which was almost a form of English pantheism. The Greeks got by very nicely by giving personalities to everything. And who was it?--Ruskin?--who spoke of the "pathetic fallacy"--I think it was Ruskin; I'm not enough of a scholar to remember. And this pathetic fallacy was the imputation of human traits to inanimate objects. Maybe you can give a more precise definition than that. But it is a very difficult philosophical point. And most of the aestheticians I've known, people like Stephen Pepper, who was a wonderful man, and others, were wrestling with this problem of why the natural scene is so important. Are we involving ourselves in a pantheistic approach? Are we escaping? What are we doing? Because nature is not aesthetic. Nature may evoke emotional reactions.

The aesthetics of art and the quality of beauty is meant as a human trait. Maynard Dixon and I used to have great arguments about the Indian's level of appreciation. The Indian probably saw Monument Valley very differently than we did. For instance, he saw it as a home. And of course there was an endearing quality to that particular landscape. And then these great natural features acquired a religious significance; I think that that is perfectly logical, and I think that is very important.

Adams: But we come along and we look at a certain view down a canyon, and we have a semipossessory sense about it, and we say, "How beautiful this is, and how wonderful this is! It's mine!" In my later years of flying across the Sierra at thirty-eight thousand feet, you look down on the Sierra Nevada of your youth, where you spent six weeks going a relatively small distance with donkeys, and the whole thing looks like God has stumbled on a cosmic rug, you know. It's just a matter of ruffles. [Laughter]

The vaster world appears, and things become symbols. And a lot of my friends in the East think I'm slightly fey--the ones who climb mountains understand. That's a challenge. It's like those ridiculous rock-climbing events that have developed in Yosemite, drilling holes in the rock. To me that's nothing but engineering, and I can't see where it is justified. It's a hazardous challenge but nothing drastic has happened yet. I mean, they do it very well, but it isn't like the real climbing; pitting yourself against the situation and protecting yourself with a logical technique and occasionally putting in a piton, which is called an artificial aid. (It's a spike driven in rock cracks and you run the rope through it.) That to me seems to be about the limit of what you can ethically do and still say you're climbing a mountain. But when you drill holes in the rock and put in expansion bolts, that doesn't seem to me to be a fair--well, it's like shooting game from a helicopter. The game has absolutely no chance.

But anyway, to get back to the early days when I went up there.* When I got to Yosemite first, it was entirely without any awareness of need of protection. I didn't know the difference between the national park and the national forest, and these things hit me as they do any number of people--with tremendous impact. And I hadn't been prepared. I guess I just responded to the natural qualities from the very beginning. That is, the details in the rocks and the presence of little things on the trails. I might say that such appreciation and indulgence requires a very good physique. People forget that you cannot climb mountains and pack heavy loads around and really explore wilderness unless you are in what would be called reasonably good physical condition or training. A vast number of people in this country are not trained at all in that sense. In fact, we're at a very weak level of physical capacity now. The farm people and miners and such people, of course, always worked hard, but they never had much interest in the outdoors, except hunting and fishing. It all gets very involved.

*For a previous discussion of early experiences in the Sierra, see pp. 227-252.

Adams: In trying to figure out why this impact is strong, I would think about it all as music, and a rather romantic experience in literature, and living around nature, like at Bakers Beach and the Marin Hills and the Santa Cruz Mountains. I mean, I was definitely not a child of the ghetto. So all of this seems to tie in, but it would be frightfully difficult to give it a true philosophic description.

If I went to a philosophic psychiatrist and tried to analyze now just what were my reactions--what, even, are my reactions today--it would be a difficult thing to explain, because for most of my life the enjoyment of nature has been a by-product of affluence of some kind. I don't mean physical wealth, but being able to live in the out-of-doors and do somewhat what you want. Money did not necessarily enter into it, although to go on a Sierra Club outing, you had to have some money, and you had to have some equipment. But it was the young people, when I was just a kid, that were living on practically nothing and being sort of super-hippies. I don't see very much difference except that there weren't any drugs around, but they needed baths as much as the present ones do.

So this particular contact with the out-of-doors is, in a sense, a feeling of meeting a challenge and a physical, or in my case, I guess, a kind of emotional challenge. It's awfully hard to describe, and I hope that I don't ramble too much on the tape.

There are certain terms you can use; I guess "revelation" or "a sudden experience." We all get that in the arts, with a great painting or hearing a great concert. I remember my first trip in the high country. Mr. Holman and Miss Smith and Admiral Pond and his daughter Bessie and two donkeys--we left Yosemite and went up to Merced Lake Trail. Went all the way to Merced Lake. I was absolutely exhausted. It was raining. We'd just get tantalizing glimpses of mountains. The first time I'd ever slept out on the ground. And Bessie Pond and the Admiral were very kind to me, and they showed me how to fix the bed and cut off some pine boughs to sleep on, which you wouldn't think of doing today. (That would be terrible.) That was the way we made beds. There were plenty of plants and trees around!

And then it rained a little that night, and I remember rivulets going in the sleeping bag down my neck. And then it cleared up, and I remember Bessie Pond and Admiral Pond--we were all lying out on this meadow. And Bessie said, "Oh, look at the stars!" and that was the first time I'd ever seen stars so absolutely bright. This was at seven thousand feet. And that again was a primal experience. It was just an amazing thing.

Adams: And then in the morning at dawn I got up and, along with everybody else, climbed up a long tongue of granite on the north. And at sunrise we saw the big crags under Mount Clark (which are really not big at all) looked very spectacular in the sunrise light. And the absolutely pure air and clean dawn wind and the glowing sunrise on these warm-toned peaks, and the sound of the river and the waterfall--the whole thing created an impact which was quite overpowering. I've never been able to put that particular experience in a photograph because it was so complex in so many ways. I don't know if I'm making sense with this. But this was the very first great High Sierra experience. That whole trip was just one fine experience after another. That was 1917.

So we all stayed three weeks, and I wrote to my mother and said, "Well, I have to go back; this is it." And she was very good about it. My father was wonderful about it. But the idea of me going off and spending two or three months in the mountains, to my mother was quite a hazard. And when I got doing more and more photography, and finally decided I'm going to be a photographer, she was very much upset. "You're not going to be just a photographer, are you?" She was thinking of me being a musician, because photography was not known as an art by people of her age and type. If anything, it was something down on Fillmore Street where you'd go and get a family portrait for a few dollars!

So this was very complex. In 1917, then 1918 and 1919, I made many, many trips with Frank Holman and friends--an old farmer, Mr. Schu, and Mr. Lewis, who was a farmer and a very fine gentleman from near Lodi--real down-to-earth people--and then a few professors. Went all over Yosemite Park, and it was sometimes rather arduous trips, because Mr. Holman being of New England extraction and a severe disciplinarian, we'd get up before dawn and would cook dinner after sunset. We would travel! Often we'd stay in one area and travel around and explore.

"Some Wild Experiences"

Adams: We had some wild experiences, like climbing the gorge just southeast of Lake Washburn. We knew there was a chock stone in it; we didn't know there were three! A chock stone is a big boulder that's wedged in a crack or gorge, and if you can't climb under it you have to climb around it. That was probably the most hazardous single thing I did, because we only had window cord to secure us. When I got to the top of this gorge I was a very happy and relieved person, and so was Mr. Holman. Because after going over the second chock stone, there was no going back. We weren't trained climbers

Adams: and were using this cord, without any technique. If we'd fallen on the window cord, we'd have been cut in two! And the gorge was very steep, so when you were climbing up the wall to get around the last big boulder (as big as this room), you were exposed to about a three-hundred-foot drop.

There were lots of experiences like that. I remember getting within two hundred feet of the top of Rodgers Peak, and I sat down on a big piece of slate, bigger than this rug, and the whole thing started to slide, and it slid for about fifteen feet with me sitting on it. Mr. Holman was white as a sheet. It stopped. Mr. Holman says, "I think we'd better go home now. We're all a bit too tired." The top was very craggy at nearly thirteen thousand feet, and we had no equipment for climbing. It's terribly rough country, and getting back at eight o'clock at night and having to cook, then stake the donkey out again--such were tough times! Someone said the "good old times" are the product of a poor memory. [Laughter] I think I've had some of that too, because we really went through some real physical agonies in the high mountains.

I remember the Lyell fork of the Merced and going to get water one evening after a clearing thunderstorm--the winds had come up and it was really pretty cold. I went to the river to get water, the bank gave way, and I fell right into the very cold river up to my neck. Well, it's icy water, but getting out with the wind blowing and getting out of these soaking wet clothes and not much firewood and trying to build a fire and get something organized is much worse! I didn't get pneumonia.

But I can inject a rather humorous event. Mr. Holman decided that we had been rather uncivilized--gone on all these trips and slept in our clothes. He was going to be a gentleman again--no reason why he shouldn't. He had a nightgown. He was going to completely disrobe, put on this nightgown and be civilized. And he hung his clothes on the willow branches (it was up at Young Lake in October). I wasn't inclined to that at all. I put on a jacket, put the shoes under my head and climbed in. That night there was about six inches of snow. I didn't know it until I woke up, feeling a pressure. "Oh, oh." I reached out and found all this snow. I got out and looked about and everything was covered with fresh snow, including Mr. Holman's clothes, hanging on the tree--his shirts, trousers, underwear, socks--everything encrusted with snow. And Mr. Holman blissfully sleeping in a nightshirt in a sleeping bag. [Laughter]

Well, the danger was that with it snowing it would be very hard for the donkeys to get out, because we were at nearly ten thousand feet. So we had to wake up Uncle Frank. And Mr. Schu and I got as big a fire as we could going, and we thawed out his clothes.

Adams: In other words, we got the snow off! And he had to put them on and they were damp. He went through agony, and we packed up and got out and went all the way to Yosemite Valley, over thirty miles. Got in at nine o'clock at night. That was the final trip of that season.

Well, that's going apart, a little, from the conservation idea.

Teiser: Well, those are typical trips, I suppose.

Adams: Yes, and they were marvelous. And Holman, of course, was very conservation-minded, in a different way. He was collecting birds for the Academy of Sciences, and he was disturbed by the sheep.

Animals and People in the National Parks

Teiser: Were the sheep always a kind of a bugaboo of the Sierra Club people?

Adams: Well, the sheep at one time were terrible. In fact, someone said the other day that the damage done by the sheep in the late 1800s is still apparent in the high country. It'll take many, many years to return to the original condition. When first Muir came, the whole High Sierra was completely overrun with sheep--even to the highest passes. So the wildflowers and the meadows were in a pretty sad state. So one of the first objectives of the Sierra Club was, of course, to eliminate the sheep from the very high meadows. That was very difficult to do because it was public domain. But when we got out of the parks and into the National Forest, then sheep were everywhere--very apparent and odoriferous. Sometimes, we'd have a hard time finding enough grass for the donkeys, because a whole flock of sheep had gone right through the high meadows for miles. You see, they might start from Bakersfield, go into the Tehachapi Mountains, then up the Kern River. Sometimes they'd have to go out to the desert on the east for provisions and supplies. The shepherds and their flocks were out for quite a few months.

Teiser: But cattle, if you control the number of them, are not so destructive?

Adams: Well, they don't go to the high elevations as much, you see. But they can do just as much damage on the lower ones. They can chew up fine meadows like Horse Corral Meadow or Big Meadow, near Yosemite. And when they go to certain types of forest with the green undergrowth, they can do a lot of damage.

Adams: A national park can't logically exist with sheep or cattle in it. In the early days, the Yosemite rangers would find a shepherd and a flock up in the northern part of the park, say near Tower Peak. They would scatter the flock and take the shepherd all the way to Wawona at the southern end of the park for trial, and then he'd spend the rest of the summer trying to gather his sheep. Pretty drastic!

When I told people in the East that Yosemite Park is nearly twelve hundred square miles, they'd say, "Oh, you mean acres." Oh, no. (It's 1200 square miles, and Yellowstone is 3200 or 3300. Glacier Bay National Monument is going to be 4000.) So to find anybody in Yosemite Park or to locate a herd of sheep would really be not too easy. And the shepherds would sneak in around the borders and take the grass. They'd have lookouts and if they'd see a ranger camp or a patrol, they'd move out.

Well then, my first idea of conservation as such came about when I met Mr. Colby and got into the Sierra Club. And you have to remember the Sierra Club started as a social group of elitists and intellectuals. They were very fine people--university people, lawyers and doctors. They were trying to help John Muir in keeping the sheep out and preserving the national park. Muir wanted the whole High Sierra to be a park.

The outings were started with the idea of bringing people into the mountains to experience them so they would appreciate their beauty and then work to protect them through congressional laws and regulations. The first motto of the club was "to explore, enjoy, and render accessible." And what they meant was this: accessible for the elitist group directly, and for all people of that persuasion who wanted to come to the mountains--without any idea at all of how many would eventually come. So the idea of even roads was not anathema at all--trails, preferably, but roads to trailheads were acceptable. Around 1908--Colby told me this, but I can't remember his exact date--he and John Muir were standing at Glacier Point. You see, Colby was a great Muir disciple--Muir could do no wrong whatsoever. (Muir was a great man. He made a few mistakes, and he wasn't perfect. Neither was Colby, and neither is anybody else, for that matter.)

Muir stood at Glacier Point and said to Colby, "Bill, won't it be wonderful when one million people can see what we are seeing today." And that's about 1908! Of course, one million people didn't have any real meaning. He meant a good quantity, a number of people. He couldn't conceive of such a number. Well, many millions of people have seen it, as you know.

Adams: The preservationist extremists have been fighting against that broad viewpoint. They say that only the most hardy people should be privileged. They'd like to close Yosemite off at El Portal, make everybody walk in with a pack on their back, assuming this would be a great experience. When you think of the humanistic balance, that would be an impossibility. There should be some places left like that, but I can't imagine closing off Yosemite. It would be the utmost of selfishness.

Colby had a very wonderful idea, and of course at that time he didn't realize all the hazards. So when we were fighting, say, the Chamber of Commerce kind of development, the park motto in the thirties and forties was, "Make every year a national park year." Everybody should get traveling, and come and see the parks. And all the concessioners thought it was wonderful. So they were building up this travel scheme which very quickly just overpowered them.

Then we had the problem of too many people and people of the wrong kind. And that came to a head several years ago at Yosemite when we had that riot and all kinds of questionable people appeared. It was a pretty difficult situation. Then suddenly it changed, and just the type of people we wanted to come to Yosemite came. All the young people who wanted to climb and hike and pack--most of them very good people--perhaps only about 10 percent were bad. And some communes were established in Little Yosemite and other places, which caused a great deal of worry--very unsanitary, for one thing. But, in the main, there's this wonderful group of young people, just the kind of people we always thought should experience the park. Now there's too many of them; even though they're all the ideal kind, there are too many.

For years, the club has been trying to justify its outings, and we finally had to capitulate. We were doing a great deal of damage with all our horses and mules--us plus other outings, and the hunters. Things were getting in pretty bad shape. There wasn't enough firewood, so we brought in gas tanks. Whole strings of mules now come in to the mountains with gas cylinders; we cook with propane and butane--whatever it is.

Now the mules are causing a problem! So the only answer is the helicopter to fly in and deposit supply dumps on a schedule rigorously controlled. It would do far less damage. Of course, the purists again say that it's a mechanical intrusion. "It spoils my mood to hear a plane." Well, the planes are going overhead by fifty to a hundred a day anyway. It's commercial planes--the skies are filled with jet trails. So it seems to me a rather ridiculous thing to say, in this age of the helicopter, that you can't come in at a given time and make a large deposit of supplies needed and get

Adams: out. People go in with the last word in outing equipment and camping equipment and portable radios, and the whole matter becomes very difficult. Just what is wilderness? If you want to really face the wilderness, you'd go to the borders of Yosemite and divest yourself of all your clothes, hardware, and food and just walk in and see what would happen!

Teiser: With the good equipment that people have now, however, how far do you think you would get with just what you could carry?

Adams: Well, I think if I were strong and could carry a good pack and I had a fishing line--but didn't include camera equipment--I think I could probably go for thirty days--probably more than that.

John Salathé, who made the first ascent of the Lost Arrow, was a "fruititarian." That is, he wouldn't eat any vegetables that grew underground--peanuts, for instance. He'd consume bananas and nuts and fruit juice and pineapple juice, and so on. He had the stamina, but when you'd shake hands with him, it was shaking a glove full of cotton. He seemed to have relatively small protein structure. Dr. Stern at Yosemite was very much interested in him medically. He said, "Where does he get his protein? I can understand where he gets energy (winos get energy just from wine), but he must have proteins because of his physical expenditure of muscle. So what does he eat?" I said, "He eats nuts, bananas, walnuts." I think he talked to him one time and found out what it was--probably from nuts.

Teiser: What did you say he'd climbed?

Adams: He made the first ascent of the Lost Arrow. That was the first really great single rock climb in history in our part of the country. It was done with expansion bolts--four days of hard work! And Ax Nelson, who was a six footer plus--a great big strong guy--was his companion. They made it and came to our house in Yosemite afterwards for dinner that evening. Ax Nelson went through a couple of steaks that would have fed a regiment--totally exhausted. John Salathé was sitting there smiling, eating raisins and a couple of bananas; he was in perfect shape. He'd done this arduous thing with a minimum of nourishment. [Laughter]

Of course, Muir said, "Well, you just take some crusts of bread and a little tea." Well, that is physiologically impossible. I mean, Muir must have had something else. Because you're not going to live on a few crusts of bread and tea and raise 180 or 190 pounds, whatever you weigh, so many thousand feet. I mean, you get to the old BTU principle. So Muir was guilty of very frequent flamboyant and happy exaggerations, which were made with the acceptable exaggerations of the times.

Adams: We used to go on trips with mush and rice and bacon and sugar and salt and flour and some tins of jam and some canned butter and canned milk, and we'd be out for weeks. Nothing more than that. We'd catch some fish sometimes. None of the amenities. But we had enough food.

Teiser: You never caught small game?

Adams: You can't in the park. We never did that. That's something that the old pioneers did and the shepherds; they did shoot deer and dry meat and so on. They didn't have other things much to fall back on.

We'd have a couple of kayaks and packs on the donkeys just filled up--canvas sacks of rice and flour and salt. The LeContes are small people--really tiny; you know, I think I ate as much as any three of them. When we planned a trip, they had to just figure out what they'd eat and then double it, because I ate a whole pot of mush in the morning. I don't know where it went. I must have had a distended digestive system, because I would eat an entire pot of oatmeal. [Laughter] Loaded with sugar. Joe LeConte would always stop on the trail for lunch, and we all had our little duties--we'd dash off to attend to them. One person would water and stake out the donkey, another one would get firewood, and another one would start cooking, and Joe LeConte would make the biscuit dough, somebody would get the reflector oven set up, and in about twenty minutes we'd be having hot biscuits with canned butter or jam. Helen LeConte will remember that very well. Then we'd relax for a while, and then Joe or I would go and get the mule and Helen would wash the dishes and Joe would get the packs balanced. Sometimes if you don't balance your packs on a donkey or a mule, you have trouble, because they slide over. There's nothing more awful than to have a pack reverse itself on a panicky animal. You're really in trouble then. So we'd balance the packs, and some of the less scrupulous people would throw a rock in a light pack, just to balance it.

There were always the nested pots. The job of getting the soot off the outside of the pot was a daily ritual. But you finally learned to do it so fast that we could clear camp in ten minutes.

One thing that was very painful, though, was going out on a frosty morning and undoing the tie ropes for the donkey, which were frozen; your fingers are aching and you're walking up to your knees in wet, cold, dewy grass, and everything is sort of soaked from the knees down, and the donkey is shivering, and giving you a reproachful look. [Laughter] That was extraordinary.

Teiser: When you went on those trips, were you doing anything that would have been common then and not thought to be harmful, that would not be done now--other than cutting pine boughs?

Adams: Yes. We cut wood to build fires. We were always very careful with fires. We put fires out with care, although on a couple of occasions one got away from me. Came back one time to a camp in Illilouette Valley and found the fire I'd built had gotten into roots and was really spreading, and I spent a whole day getting that thing out, scared to death. That happens to everybody. We were extremely careful about it, but we weren't as careful then as we are now.

Teiser: You gathered your wood as you went?

Adams: We just gathered the wood; the wood was everywhere. Now there's hardly any available wood along the trails. The tragedy is in the High Sierra, way up high, where the beautiful white albicaulis are-- dead white branches. Now people go as much as a mile off the trail to gather those. This was typical of the High Sierra. This kind of white flame has largely been burned up.

I remember at Moraine Lake, the Sierra Club lit up a great dead Foxtail pine. It was standing right in the middle of a sandy area. We built wood against that and lit it, and the tree went up like a four-hundred-foot torch. Well, we wouldn't even think of doing that now. But there were just thousands of dead trees and a few score people.

Teiser: How did you handle your garbage? Any differently than you'd handle it now?

Adams: Well, we always dug a hole, which we know now that the bears always came along very promptly and undug. With a small party, that isn't too bad, because there isn't very much. We always buried the cans. One way to do it is to put them down crevices in rocks and put rocks on top of them.

But the Sierra Club garbage pits used to be dug six to eight feet deep, and the bears would get into that. So we used to get roars from the Forest Service people about it.

Teiser: Is that bad for the bears?

Adams: I don't think anything can hurt a bear much.

Teiser: But I suppose they scattered stuff.

Adams: Oh yes, they dug it up, and there were cans all over the place. A terrible mess. The forest rangers would have to rebury it. Bears are really terrible--what they can do. They can smell through many feet of earth, and they'd dig down deep and get it and just scatter it over a large area.

Adams: So now we pack out everything, you see. All the cans are smashed, compacted. There's nothing wrong with organics. That's the thing we have to remember, that organic garbage--food wastes and peelings and all that. We go up to the rocks and scatter them, because the animals will eat it, and it will naturally go back into the soil. But it's the foils and the cans and glass and the plastics that cause the trouble.

Teiser: Has there been a need to control the bear population?

Adams: It's controlled very stringently. They have what they call bear traps, and they'll catch a bear and take him way out--fifty or sixty miles. Then of course he'll probably come back. And they shoot a certain number in the national parks. They have to do that with deer. Deer are very bad. Because the deer proliferate and the predators are minor, and people feed deer all kinds of tidbits and garbage, and the deer suffer. At the Grand Canyon, I never saw so many awful-looking deer. I think they had a real cleanup and shot hundreds of them; they had to, they were in such bad shape.

But, you see, there was a bounty on mountain lions, so the mountain lion population dropped, and it knocked the balance of nature out. The same applies to the coyotes.

Teiser: There's been some effort to save mountain lions now.

Adams: Yes, there's so few of them. But as soon as there's a few more of them, then they'll start doing damage to the herds again, and then the cattlemen will object strongly. It's a very difficult thing because coyotes and mountain lions do raise serious problems for the ranchers. It's awfully hard to know just what is the right or the wrong thing to do. If I say now to certain people that parks are for people, why, I'm branded a traitor to the cause. I strongly believe that, but under strict controls. But how do you justify predators doing serious damage to herds? We put ant powder around when the ants get in our sink. I'm trying to find the essential logic, which I find very difficult sometimes.

Teiser: I was reading a quite superficial account yesterday which was indicating that at one time there were two opposing camps: the Muir people, who wanted to protect everything, and the Gifford Pinchot people, who wanted multiple use!

Adams: Yes. The argument still goes on. [Interruption]

Sierra Club Indoctrination, 1923

Adams: My first direct contact with the Sierra Club, other than personally knowing Mr. Colby and the LeContes earlier, was in 1923 when the club came to Yosemite when I was custodian of the LeConte Memorial Lodge. They started out from Yosemite, up the Yosemite Falls Trail, Yosemite Creek, over to Waterwheel Falls and down to Pate Valley, and then they went up the Tuolumne River to Tuolumne Meadows.

Mr. Colby asked me if I'd come with them for the first part of this trip, just for a few days, and I did. I went up to Yosemite Creek with them and on up to Ten Lakes and then dashed back to Yosemite because I had to keep the LeConte Memorial open. But Clair Tappaan, Judge Tappaan from Los Angeles (his son is Francis Tappaan, who's still living--manager of the outings later on and a very fine lawyer)--he left me his big car, an "Oakland Eight," an open car which was really a huge hunk of machinery. The club had gone to the northern part of the park and about half way through they'd come back to Tuolumne Meadows, and Mr. Morley, a mining engineer, had been on a rock climb with some of the people on what they call now Matthes Crest (which is near Coxcomb Crest of the Cathedral range). He had slipped and fallen and had mortally injured himself; he had a basal skull fracture. They carried him back miles to the meadows, and I got a telephone message to bring up the car. I'd just been up the day before with seven hundred pounds of meat, which I had loaded up at the village store. I drove up, spent the day, and came back early the next day, then that night proceeded to bring up the car again.

Dr. Walter Alvarez and Dr. Herbert Evans were at the LeConte Memorial planning to go in the next day for the beginning of the second two weeks of the trip. We drove up, leaving at midnight. There was nothing we could do much for Mr. Morley. He lived about a week in the Parsons Lodge. And Mrs. Morley came in by taxi from San Francisco and we were all very grim. The [club] trip was modified somewhat because some of the people had to stay there with him.

Well, it was on that first trip when I got the indoctrination of the Sierra Club ideals. That was my basic introduction to the conservation world. (I put that in different terms from the natural world, because the conservation world is the world of people relating to regulations and laws and procedures, really trying to accomplish things.) So I had a chance to talk to many people at that time, and I really learned a great deal.

Concepts and Techniques of Conservation

Adams: I would say that was the first time I was really aware of the--what do you call it--the real meaning of the word "conservation," which is of course a very bad word, because it relates to the conservation of everything, from oil to bad habits. [Laughter] "Ecology" is an equally dangerous word to use, because it is a scientific discipline. I think the term "environment" or "environmental procedure" is good because environment implies conscience; it's everybody's environment, yours and mine, and the quality of conscience comes in there. So what we're trying to do is to preserve an environment, which of course is subject to many definitions, but never out of a certain logical pattern. Conservation was the accepted catchword, and was used by Gifford Pinchot in the conservation of lumber and the conservation of oil and the conservation of natural resources and, perhaps, the conservation of scenery. So, to many minds, it has many meanings, and that's I think an important point.

Well, the Forest Service, representing Gifford Pinchot's philosophy, is very powerful. We can't forget that the Forest Service was set up as a conserving organization to control the management of forests for the benefit of lumber people in the country at large--lumbering and the lumber industry, and by implication, the people at large who wouldn't want to cut down all the forest because there wouldn't be any more lumber. It was an economic not a "spiritual" conservation.

[End Tape 24, Side 1]

[Begin Tape 24, Side 2]

Adams: This is a very complex thing that few people really know about now, except those that were in the field.

The Forest Service was set up to preserve the forests for the economic integrity. That is, to manage them, and in that proportion their cutting and their control and their replanting for definite economic purposes, because people had gotten into the forests and were devastating tremendous areas, with great damage to watershed. And the Forest Service also took over grazing. The interplay of watershed was terribly important. So this was really management of natural resources, primarily for economic reasons.

Pinchot was very much against Muir and everything he represented. He fought Muir on the Hetch Hetchy [dam] and many other things. His idea was, well, it was nice to go out in the woods, but the woods, of course, are for the benefit of people at the economic level.

Adams: Our former director, Bestor Robinson, a lawyer, was very close to the Service and did a terrific amount of good in adjusting Sierra Club policy to the Service and getting the Service to realize they had to have a little conservation of another kind too. As the Forest Service progressed, we were able to define the first concept of "wilderness areas"--and also to open up areas for recreation. I remember in the early twenties we felt that things were sometimes more intense and more untouched and more "unmanicured" in the Forest Service areas than in the park areas. And we used to go over Isberg Pass in Yosemite into the Forest Service area where there'd be mines and sheep, and we'd find a "human touch." We didn't fully recognize what this meant, but there was something "human" going on there. They were a different kind of people than just tourists--there were miners and shepherders and cattle people. They were all a pretty well bunch of people. And we weren't too conscious of breakdown because, again, there just weren't that many people involved. Sure, we were annoyed by the sheep and it was sometimes difficult to find a campsite that you could stand, but that seemed all part of life.

And many friends used to come to Yosemite and say, "Oh, the hell with the mountains. I just like the natural life and picking up and getting wood and water and getting out there battling the elements." And that was a very important part of their philosophy.

So the Forest Service gradually undertook a recreation program, and then the Sierra Club worked with them in getting them to save certain important areas. We were very instrumental in accomplishing a great deal with them, and I think we could have controlled the Mineral King situation because we weren't against any ski development as such; we just didn't want to have some colossal enterprise going on in a beautiful place and building a road across Sequoia National Park to get to it.

But again I have to say that Dave Brower and his particular group were so antagonistic and so uncompromising that the Forest Service and the Park Service and the lumber people, who used to talk to us (we used to come sometimes to very reasonable, balanced conclusions) would no longer have anything to do with us. So the costs of that regime will never be known. It's a thing I never like to forget, and I certainly can't forgive, because I know the damage is too great. And you don't get anywhere by kicking people in the shins when you should be sitting down around the table.

I think I remember saying that the Save-the-Redwoods League faced the reality and handled it in the most wonderful way. The lumber people owned the redwoods, not the Bureau of Public Lands or the Forest Service, lands that could be switched around by government edict. This was private property. Now, how do you save redwoods on private property? You buy them. You either get them to give them,

Adams: or you buy them. The Save-the-Redwoods League and the state parks on the matching-fund bond issue bought very considerable areas of fine redwoods. And my recollection of the whole thing is that the lumber people really cooperated pretty well. I mean, they sold at a minimum. But you can't merely appropriate it without recompense, and that's what the wild-eyed people that have taken over the club in recent years have tried to do. They've said, "They can't cut their trees. These are redwoods; this must become a state park." Where's the money? "Well, that isn't important." It happens to be important because eminent domain is a pretty well-established fact of the American constitutional government. You just don't go in and appropriate lands. The animosity that that attitude caused, you never know what the price was on that.

Some people say that the Grand Canyon was saved from dams because Dave Brower and his group took extremely aggressive action. Remember that phrase, "Would you flood the Sistine Chapel to better see the ceiling?" [Laughter] Well, that was my phrase which he appropriated, and I was always ashamed of it because we never intended to flood the Grand Canyon; we were going to put dams at the ends and somewhat restrict the river, but the Grand Canyon was not to be filled with water. They gave the impression that the whole Grand Canyon was to be turned into a lake, you see, which it wasn't.

Well, in any event, I'd rather dams were stopped, but I think they could have been stopped by logical methods, as well as what I call "aggressive public opinion dynamite." I'm not entirely happy having the Grand Canyon developed in even most minor ways, accompanied with basic hard feelings. I think problems can be balanced. And again, I'd like to say that even in the 1920s there were many poor people--what we call now our ghetto group--who were questioning the expenditures of funds for a lot of wild rock and trees in the parks when there were dire social needs.

I remember when Point Lobos was bought for \$400,000, and Colby raised half of it and the state put up the other half. I think it was \$400,000. I had some friends who were absolutely furious to spend all that money for just a lot of old cypress trees and rocks when we have poverty, health problems, and other shameful situations, right in San Francisco. They have a very strong point. In the next several years, this point will have to be resolved, because the ghetto people aren't going to stand for the incredibly miserable treatment they're undergoing, while they see billions of dollars spent in rockets and space exploration and buying up vast tracks of wilderness, which to them means nothing at all. I believe it's a matter of education. And I'm really concerned about it. But I know that even that early, in the twenties, there was still a feeling of antagonism--the cattlemen and the San Joaquin people were very

Adams: resentful of the park, because of the restrictions on cattle running. They were very resentful on parks because they couldn't hunt when they wanted, especially even in the hunting season.

We had the problem of the Lone Pine-Porterville road come out in the twenties or thirties. Colby and his group were very much against it because it was a true invasion of wilderness. The club had figured out that the best way across the Sierra was at Minaret summit; the road would go up the San Joaquin River, pass Huntington Lake, and on over the crest. It was the least interesting part of the Sierra at that point, although the Minarets to the north and the San Joaquin Mountains to the south were wonderful. But the pass itself was far less interesting than Tioga; the least interesting pass in the whole Sierra.

So we made a gentleman's agreement. I was at that particular lunch with the chief of the Highway Division. It was a gentleman's agreement; such things couldn't be legally bound. As long as this administration was in, they'd support it. We would press for the Minaret summit road if they would give up Lone Pine-Porterville road. Nobody mentioned developing the Tioga; we thought it was just too impossible. And it was at that time, technically, with the machinery available. Well, of course nothing happened. The Minarets road wasn't developed and the others weren't developed, and the Tioga road was then developed. And I remember putting up a squawk and saying, "Well, why don't we press for our Minaret summit road to forestall this?" Oh, everybody became very mad and denounced the Minaret summit road, that it would "bisect the John Muir Trail." And that was the emotional plea, as if it would have beheaded the Sierra! The John Muir Trail does cross that area, but when you're bisecting a trail, just what do you mean? I mean putting a road across and putting an overpass or an underpass to something is not doing any damage to a trail. And I wanted the road to go over in the form of a parkway where there would be no side roads in those particular areas, which would mean that you'd have to go away almost to Mammoth and come back on this little old existing road to Agnew Meadow and that you wouldn't have the road as an invitation to invade the wilderness.

The frantic people on that opposition side considered it to be absolutely awful, and they denounced the Minaret summit road. And then the Tioga Road was put through and did a great amount of damage that never should have been done and could have been avoided had this other road been established. And we still don't have the Minaret summit road. As sure as fate we're going to have one at Lone Pine-Porterville, and further development of the Walker Pass, and further development of Tioga because this population that's growing in the San Joaquin have got to get their products east.

Adams: Dr. [Edgar] Wayburn, who was president of the Sierra Club during its more impassioned and sometimes more stupid period, replied--when I asked him, "What are the farmers at Bakersfield, Fresno, and as far as Merced going to do?"--"Let them go up to Sonora Pass or Donner Summit." I said, "Well, let's be realistic. You're telling a million people that they have to move their produce hundreds of extra miles, and they're going to fight for a road across the Sierra. Why don't you accept this fact and have it where it will do the least damage?" I was considered a traitor to the cause for that attitude, but I still stand up for it. If that kind of thought signifies being a traitor, well, so be it. I find it very disturbing.

I find the lack of logic--and I've always found this--in the early days--that there were always a certain number of people who were very practical. I can think of people like Colby and LeConte and Robert Price and Judge Tappaan and Marion Randall Parsons and Aurelia Harwood and, oh, Bestor Robinson, Dick Leonard et al--who were primarily completely devoted to the ideal but also were, in the best sense of the word, practical. They were trying to say that, after all, people do exist and we can't exact impossible things. How do you save the most? Because by cutting out this Minaret road, you are not saving the most, you are losing. I'm all for saving the most too, but there are ways of doing it.

Then of course you have in the next ten years the development of different modes of transportation--the plane and the rapid transit systems are certainly going to cut down the automobile and the truck. But we don't know when or how. But I still am emotionally shocked when I see a helicopter coming into a High Sierra meadow. But then I'm also shocked when I see a string of fifty mules come in and chew up the meadow. The meadow isn't hurt by the helicopter. So I've had to make that decision.

In fact, I always had that tendency. When the first idea of a cable railway to Glacier Point was suggested, we all rose up in abject horror. I mean, this was like desecrating the Vatican or something. Then the road went in. (It was either the cable or the road.) The cable was so resoundly beaten that the government constructed the road. And when I saw the road and its terminus at Glacier Point, I realized what a hideous mistake I'd made in supporting it--the road against the cable. Because the cable would have gone where we planned it and hoped it to be, up the gorge on the east side of Sentinel Rock, and you wouldn't see it. There's power lines there now that you don't see.

Teiser: There were early suggestions that an elevator be put inside the mountain.

Adams: That would have been perfectly acceptable but extremely expensive, and would have presented a tailings problem, but I don't think too bad. I do not believe you could do it in one stage. You can take a mining cage with a few people a long way down, but to have an elevator to handle big crowds of people for a three-thousand-foot drop you've got an engineering problem. So you must have perhaps three stages; at least two. And that involves a great deal of power and what would you have done with the tailings--the rock? You see, when they cut out the Wawona Tunnel, most of the rock went into building the esplanade that you drive out on. Some went east to some fills in the road and some also went down towards the valley. But that's a four-thousand-foot tunnel which is 20 by 20 feet; it's a terrific amount of stuff, but they used that to build up the esplanade that you drive out on, etc.

One of the most wonderful things about Yosemite is that from that esplanade view you cannot see a road or any of the works of man whatsoever except the old four-mile trail if you look very carefully. And there is a quarry that was west of El Capitan, which is now grown over. Most people think it's a gully. But there's absolutely no sign--it's one of the great achievements of planning. Well, if you go over to the far edge and look down, you see the highway by the river. But when you look at the main view you see nothing.

Teiser: That brings up the point of reclamation--not in the usual sense--but you say there's a quarry overgrown. Have you seen a lot of damage repaired, in your recollection?

Adams: Yes, quite a lot. Some roads have been taken out. Not much damage has been done in Yosemite. The road from the Ahwahnee to Camp Curry and the road north from the old village were taken out. It's not quite as simple as it sounds. They have to remove all the blacktop and several feet of fill, and then they have to allow natural soil conditions to develop. The roads cut the meadows in half. But the scar of the old road from the Central Bridge is practically gone. I haven't seen too much damage in the valley. The place where great damage occurs and can never be replaced is on the granite slope from Olmsted View going down to Tenaya Lake. That's a great tragedy. They also cut right through the roche moutonnée beyond Tenaya Lake. It'll take another glacial epoch to replace it.

On the east side, Leevining Canyon is an irreparable mess. It's a wonderful road to drive on, but it's just a vast cut in the mountain-side.

Now, in some of the other parks--the road up to Mesa Verde is very visible from below. I think the worst example of stupid engineering is in the Hawaii National Park, leading up to Volcano

Adams: House through the rain forest. It's an absolutely straight road for miles and miles and miles. When you see it from the air, it's just a cut. And the superintendent was so proud of that! (He was an engineer.) He said, "This is one of the straightest roads in the whole park service. It's wonderful." All they had to do was to wind it about a little! But now it is just a cut. When you're driving on it, you go for miles in a straight line, and when you're up above, flying, it's just a gash. It's very bad taste.

Well, my conservation concept just grew, a kind of "personal Topsy." And I became more and more interested in the club. For a while I was a member of the American Alpine Club. That's a very snobbish group. We really didn't have anything in common. It really is high society, again an elitist club of the worst kind. There are nice people in it, but they're just out there to climb, you know. I don't think they have much or any influence in conservation.

Forces For and Against Conservation

Adams: The Appalachian Mountain Club has been wonderful. Then, of course, Robert Marshall set up the Wilderness Society, which was a great thing to do, and George Marshall, his brother, has been very active in the Sierra Club.

Teiser: You mentioned staying in the apartment of someone named Marshall in New York when you were helping the Newhalls move. Is that the same one?

Adams: Yes, that's the one. They had an apartment on Ninety-sixth Street, then they built a house on Beekman Place. It was very beautiful. Then they moved out to Beverly Hills. They're marvelous people-- George and Betty Marshall. Really dedicated. Their father was the great Louis Marshall, a liberal lawyer. The story is he left \$15 million which was divided up between three brothers.

Robert Marshall was a strange, recluse-type person who was devoted to wilderness. He loved Alaska, especially the Brooks Range, and he died rather young of a heart attack. He did an immense amount of good in founding the Wilderness Society.

Now we have a problem that ties in with the oil pipeline problem. Really it's a situation that if you're not going to have oil, you've got to have something like it. Do you need the oil? A lot of people say you don't, and then the realists say there's a lot of oil coming from Venezuela. But South America may nationalize

Adams: its oil. So the government had this idea of securing resources from the north shore of Alaska, the Arctic side. And the oil pipeline is to me probably the stupidest thing in the world because it's absolutely vulnerable to sabotage--eight hundred miles of mostly exposed pipe. Just imagine what you could do in a total wilderness. They do have shut-off valves frequently to control pollution.

The brightest idea I heard of was building super tanker planes. They'd be several times bigger than the 747. They just load up with oil and fly to special air fields, and of course the bigger the plane is, the safer it may be. But if it does crash, it would probably be completely consumed by fire. It depends where it crashed. But it would be safer from the pollution point of view than great tankers.

We didn't get anywhere with Canada, which was too bad, because we could have paralleled some lines there. So it all boils down to the question, do we need the oil? And if we really are honest and truly need the oil, then I suppose that's the place to get it. But the pipeline seems to be the worst possible way of conveying it. Don't worry too much about the pollution hazard, though, because in normal conditions I think pollution would be a very minor hazard, but in war conditions we'd have something else to worry about.

Teiser: Well, in the early days the forces against conservation seemed spearheaded by the big businessman. Now they're what?

Adams: Well, there's been enlightened big businessmen who've always supported environmentalism. There's been the mining interests, the lumber interests, the cattle interests, and the sheep interests, to whom restricting areas in which they could function would naturally be to their disadvantage. Seeing that they do not have any wilderness mystique whatsoever, they think we're just a bunch of nuts. They just can't understand us or our ideals.

Then you take people like Walter Starr, who is one of the early Sierra Club people, a great man; he was a lumberman, head of the Soundview Pulp Company. And he was really in a very difficult position, because whatever he would support as conservation would be in antithesis to his business interests as a pulp manufacturer. He did a great deal of good in trying to convince the lumber industry that there was some give and take involved, and that they had to consider natural beauty, that we knew we had to have pulp, but we don't have to destroy a prime place to get it. That had been the battle all along, and we fortunately had very fine industrial people who would support our theoretical point of view. But then, when it comes to the showdown, they very often have to take the realistic point of view in relation to their business.

Adams: We have a situation in Yosemite now that they've closed off the plaza in front of us [Best's Studio]. We think it would be perfectly wonderful to have all that blacktop taken up and the plaza put in pools and greens and trees and make it just a mall. We'll have to adjust our business to it, that's all. Instead of having cars out there, we'll have, we hope, a very beautiful mall in which people will congregate. But what they did was just to cut it off to keep the cars out of it, and they haven't done anything since. It's been extremely bad for business. So then we come in as conservationists, put it this way, and say, "For God's sake, get business and get that mall going. From the business point of view, why did you cut the cars out until you were ready to do this thing to the mall?" It's cost us maybe \$20,000 in the last two or three months alone, just by not having cars and an empty parking lot.

Well, the government said, "It's an experiment to see how people use it." Well, the people aren't going to use an empty parking lot; but they certainly would come and use a mall. So that's one of the things we're hitting very hard on now. Balance the conservation! Ideally, we shouldn't be there in the first place, but we are there and the concessions are there, and the public is served in a particular pattern. Now the automobiles are going to go out and there are going to be buses, which I think is great, and then the accommodations will gradually be cut down, and then all of the facilities in the valley will be moved out. And while there will be the restaurants and perhaps our studio will remain, all the employees should be moved out. I'm pleading just to have somebody sleep in the building at night, just for security--the manager, somebody. And even that is considered to be out; it's up to the rangers to protect! But that's quite a number of years in the future. It's this constant balance, you see, between obligation, the ideal theory, and the fact that Yosemite belongs to the people and is a great experience which everybody should share--all that contrasted with the concept that it should be restricted only to those that can walk in for miles on their own feet.

I think there was a time when I would have espoused that idea, because I could walk anywhere on my own feet--ten thousand feet elevation a day, if necessary--but that is a very selfish point of view. And yet, there has to be a balance. Now, when you look at the Disney development, that's a terrible, hideous thing in the other direction. So who's going to make the decision of what is control? I mean, the focal point of policy. What is the vista cutting going to be in the valley, getting out this overgrowth of trees? Well, normally it would have been taken care of by fire. We had fires every so often; the Indians burned off the undergrowth and small trees so they could better see game, and the whole open

Adams: Sierra forest, as Muir saw it first, was the product of fire. We stopped the fires, and now we have this tinderbox of undergrowth. And we no longer have vistas, so we can hardly see the great objects.

Teiser: What do you do? Selective logging?

Adams: Well, if it isn't selective logging, it's clear cutting--it's a terrible thing to try to even figure out what to do. You have to have a committee or group of people who are sympathetic in the aesthetic sense. I mean, we'll not just dig tunnels to see a view through. We have to say probably 1900 would be a good year to hit for, and study old photographs and just take out hundreds and hundreds and hundreds of trees. We're burning off the meadows now. We've burned thirty-four thousand little trees off the El Capitan meadow, which was a terrible mess for a few months, and then it all came out green and lively again. If that hadn't been done there wouldn't be any meadow in about ten years; it would all be small trees.

Now, what right have we got to interfere? We have interfered by restricting fire; that's been the first interference. See, if you just said, every time a fire starts, let it burn....This whole hill here, where we are now, was burned off completely in, I think it was, 1923. And if you go out on the road, you'll notice there's oaks on the north side of the road. There's no oaks on the south side. That road was a natural fire break. Now what's going to happen to this hill? It's changed a little in ten years, but in theory it should have burned off before this. It burned off more than fifty years ago. If it's not burned, then its basic character changes.

Like the bug infestation in Tuolumne Meadows. I've seen three of them. When I first came there was a stand of dead trees, with young trees coming up. Twenty-five years later, another stand of dead trees, and young trees coming up, and then, not too long ago, another stand. Then they sprayed, when they wanted to stop the infestation. Well, did they stop it? They completely changed the character of the forest. The hemlocks persisted--beautiful hemlock groves all over the Tuolumne area. And they sprayed down the river, and all the bugs left, and then all the fish left, and now the bugs are back again. I think they're learning now, that this was a natural thing, which has been going on for thousands of years, which gave us the Tuolumne Meadow forest. So why do anything about it?

For a number of years, you'll see a beautiful mixture of white tree trunks and then they gradually fall and go back to the soil, and the new trees grow up, and pretty soon the bugs get them. This is a balance. But I don't know how long these shrubs on this hill,

Adams: for instance, are going to last. How long-lived are they? They could easily defeat themselves. We could have a fire, and nothing would remain for a while. Aesthetically, it may be sad to look out on a burned hill. That's where man's interference comes in; he doesn't want a fire.

Teiser: I grew up in Oregon, and I remember great mountainsides of dead trunks of trees from their terribly, terribly intense forest fires. The forests must have been protected and allowed to grow so dense that when it came the fire destroyed everything.

Adams: Well, that's it. Around Sequoia Park and the foothills now are the most deadly areas we have, and even the big trees can't take the threat of really intense fire. The big trees have taken many fires. You see charred scars on them. But when a fire starts up in that present area, it's going to be something unbelievable.

Now, what can you take out? We talked about selective logging. You go into a beautiful forest, and they have this tree taken out, then that one and that one. The trees are felled and the forest looks awful. It loses its aesthetic quality; the mystique is gone. If it was only once it would recover, but then they come in the next four or five years and take another set of trees out. So the forest is always in a state of surgical operation.

Now, with the complete clear-cut and a forest beginning again, by just sowing seeds or planting at random you create a new forest which is aesthetically much more important. But that's the problem that I can't seem to get anywhere with, with people. Everybody has totally different ideas.

I'm always interested in the young person who says, "I'm having a new life style; I'm going out in the wilderness." So he goes out in the wilderness with the best possible pack equipment and boots and beautifully condensed food, right down to the limit, and a little Probus stove and a transistor radio. He thinks he's facing nature. Now, as soon as his things begin to wear out, he's in a terrible situation. His radio can wear out--that wouldn't kill him. But as soon as his boots go, or his pants begin to tear, or suppose something happens to his eyeglasses? I mean, just think of the fact that indulging in the wilderness is an illusion. We don't indulge in the wilderness, we indulge in the wilderness mystique. We have a magnificent backdrop of natural beauty, which to us is very emotional and gives us spiritual, emotional, and aesthetic benefit. The aesthetic is something else--that's a function of art.

You know, just go to talk to somebody who lives (and likes) south of Market in San Francisco, or over on Telegraph in Berkeley or in Harlem in New York, and try to figure out just what they think it is. "Man, just what you talking about?" [Laughter] They wouldn't have the slightest idea.

Balancing Preservation and Recreation

- Adams: A director of the Park Service should be trying to achieve a balance. We are trying to get park and recreation areas near big centers. The whole concept of the park service system is changing. We have to preserve wilderness, some of it, at least--that's very important. We have to provide much more recreation. But to say "provide a wilderness experience for the multitude" is impossible, because if the multitude is introduced to it, you no longer have wilderness. It's a very serious question.
- Teiser: I've always wondered about those Sierra Club trips, when two hundred people go out at once.
- Adams: Well, the only reason we tolerated that was, they were all of the same sympathy and understanding. There were always some kooks on it. There's about five difficult people on every outing. There had to be. But everybody was there for the same purpose, and we all tolerated the confusion. I used to think of that a great deal. People would say to me, "You go out with two hundred people. How do you enjoy the country?" I said, "Well, they are all enjoying the same thing." So you are my brother or sister in wilderness, and you do not bother me because you believe in what I believe in, and vice versa.
- Teiser: But can you all stand on the same rock at the same time?
- Adams: No, it was really quite a remarkable thing. There was very seldom any sense of confusion. Two hundred people isn't many--spread out over a large area. It's a "tribal" thing, let's put it that way. And the other tribe of hunters, you see, or wealthy tourists coming in with twenty mules for five people, these were the things we were fighting. But the two hundred people who were of our tribe, that was sort of a joyous exodus. It had its own particular psychology and its own particular social validity. We could imagine at any time certain people coming in that could have destroyed that. In fact, we sometimes did have such people. As I say, there were always four or five people in our group who weren't in sympathy.

But that same thing occurs in art and musical groups and any group you can think of. I'm sure the California Historical Society has got a few members in it that cause problems. But, after all, what is history? What is wilderness? I think Ted [Eldridge T.] Spencer, the architect, had by far the most enlightened concept of development in Yosemite, because he was fundamentally a humanist, and extremely well trained as an architect in Europe, and his wife a great authority in stained glass and a very fine artist. And they looked at it humanistically and asked, "What are you trying to

Adams: preserve? Now you can't hurt the cliffs--" (well, you could if you wanted to really destroy them). "You can hurt the meadows and the floor of the valley." So here's a whole concept of development which would put all construction in what we call the talus area. That's the oak-covered area between the cliff and the meadow. There structures could be built and hidden. You couldn't see them from the meadow and you couldn't see them from the heights. And the thing against that was it was rather expensive, putting in sewers and water supplies and roads in a very complicated, rocky talus area. The best example of that is the employee or executive housing section that's just east of Yosemite Village. You can't see it, and yet there's approximately twenty-five houses in there. They're built right into the rock and the oak trees cover them; you can't see it from above or below or from the side.

So in his concept the person coming to Yosemite has the experience of the gigantic cliffs and the beautiful tranquil river and the meadow, and that's it. And put your human elements out of sight in the slope, where they could be hidden.

The new concept at Glacier, after the hotel burned down (which was a total monstrosity--only sad thing of its going, it burned up a lot of nice trees too) is that there may be the esplanade. You'll get off the bus or the tram or whatever's there, and nothing will interfere with the view. You'll walk out and have one of the great views in the world in front of you. And then you will go downstairs to accommodations and restaurants and gift shops and things, and they will be below esplanade level. There won't be anything above. Of course, this is a tremendous concept, and a lot of the stupid concessioner types will say, "We want people to see our gift shop!" And at Glacier Point, you used to get out and walk into the hotel to the front porch to get the view, and you went through what is probably the worst gift shop that I've ever seen in my life, which is not a preparation for this tremendous view. And yet I'm quite sure that the average person didn't have much of a sensitive response to it. They go and buy an Indian pennant pillow or a crazy curio and then go right on and look at the view. But it really wasn't any reparation for this particular experience, which should be of almost religious dignity.

I remember going into the chapel at Princeton, which was the last gothic building built in this country--my friend [David] McAlpin insisted we go in. And we sat down and the organ was playing (the music department kept the organ going most of the time). And he insisted we sit down at one of the pews at the end and look at the windows; then we moved down closer and looked at another window, then we went over and looked into the apse, or whatever they call it--perfectly beautiful windows and this gorgeous music, and this was certainly a "preparation." Well, why not? Things like that could happen in a great park.

Adams: I became rapidly conservationist and skeptically political, and I guess I did the job I had to do. But, as I look at it now, I'm trying to recognize the fact that there are millions of people who have the right or the privilege to experience certain things. And certain things cannot take more than a certain impact, or else the experience is damaged or lost. So how do you show millions of people Yosemite without destroying Yosemite? And how do you maintain a little wilderness where somebody, kids especially, can go and camp and experience some degree of solitude? How many can do that without destroying the very thing that's important?

[End Tape 24, Side 2]

Sierra Club People

[Interview XXI (Sierra Club Interview II) -- 11 August 1972]
[Begin Tape 25, Side 1]

Teiser: I've been reading Helen LeConte's copies of the Sierra Club Bulletins, and I copied down the names of the people who were the officers and directors in the late twenties, which would be I suppose the first group that you encountered.

Adams: Well, my first trip was '23, if I remember. I went on the trip for a few days. Many of the directors participated in the outings.

Teiser: When did you actually join the Sierra Club?

Adams: Oh, I would imagine it would have been 1918 or '19.

Teiser: Just before you--

Adams: Took charge of the LeConte Memorial, yes.

Teiser: I came across something that Marion Randall Parsons wrote in 1919, which was the year you were first at that lodge. Maybe it says something about the temper of the club at that time.

She wrote: "Our members should consider themselves guardians of the scenery of the West, an intelligent mass of a public opinion ready to voice its protest when the well-being of the parks, or of areas that ought to be parks, is in question."

Adams: Yes, that's a great statement! She was a very gifted woman and a very good writer. I think that that's one of the best early statements of club policy. Actually, when the Sierra Club started (prompted by Muir, and Colby, more or less his right-hand man) the

Adams: word "club" meant just that. It was a group of people who enjoyed the hikes in the mountains. It was a "closed" club; you had to have two sponsors and all kinds of credentials to get in.

Teiser: Someone said that even in the twenties it took months and months to be admitted.

Adams: Yes. The membership committee had to see the [sponsoring] people and talk to them.

Teiser: Was anyone ever not admitted?

Adams: Oh yes.

Teiser: On what grounds?

Adams: Well, perhaps somebody didn't like them! There has to be unanimous approval of the board. Some very nice people were turned down. And then there was some racial trouble. Oh, they were very anti-Jewish for a while, at the start.

Then in the thirties we had a very clear policy of no racial restrictions whatsoever. But the Los Angeles chapter tried to prevent a black lady from joining. We threatened to cancel the charter of the chapter if they didn't accept her. There was no valid reason for refusal other than that she was black.

Teiser: Are there Jewish members now?

Adams: Oh yes. And black members. We never have enough of them, but we find that relatively few black people are interested in wilderness. Jewish people are very much interested. In the twenties a good percentage was Jewish. But in the beginning it was pretty WASP.

Teiser: It was heavily university too, wasn't it?

Adams: Pretty much so. Universities, legal profession, and doctors. But that peculiar uppercrust of the WASP domain is very hard to define. They're wonderful people, and they're the soul of integrity, but they just had a class consciousness. As a social club, that might be understandable, but then of course, when it got into the larger domains, it wasn't.

Teiser: I see that Marion Randall Parsons wrote frequently in the twenties for the Bulletin. Who was she?

Adams: Well, her name was Marion Randall originally, and she married Edward T. Parsons, who was, I think, a big lawyer--a good but rather crusty man. Some people said he was very difficult, but he did a great deal for the club. He put up the money for a memorial

- Adams: of some kind; thought there might be a nice place in Tuolumne Meadows for what you called then a "lodge." The club had bought the McCauley property, and I think Parsons was very instrumental in acquiring that. Now, these are historic facts that I can't be sure of, but I know he was quite important. The Parsons Memorial Lodge was constructed in his memory.
- Teiser: I'm surprised how many women were active in the club.
- Adams: Oh, many! We had Aurelia Harwood as director and then president. She was a wonderful woman.
- Teiser: She was from Southern California?
- Adams: Yes.
- Teiser: What did she do when she wasn't--
- Adams: Oh, I guess cut coupons. I think she was a New England lady. And there's the Sierra Club Harwood Lodge down south, in her memory.
- Teiser: Then you had Aurelia Henry Reinhardt as a director.
- Adams: Oh yes, she was a very important person. Then Marge [Marjory B.] Farquhar, who's still living, of course. She remains very prominent. Now, we have two women on the board, I think, both very aggressive. Virginia was on the board for two sessions. I deposed her [in 1934]. She had enough to do with the kids!
- Teiser: It looks a little as if the people on the board and the officers played musical chairs for many years.
- Adams: They did. It was really a closed corporation, in a sense. Mr. Colby really ran it for many, many years. Of course, he was a person of absolute highest integrity, so it was a good thing.
- Teiser: Were there any quarrels with him? Did people counter him?
- Adams: I think there was some opposition, but of a very minor nature. You know, people of a superior ability, they are resented per se. If you find anything to gripe about, you gripe. I think the worst thing that happened to him was when he was chairman of the state parks, and one man went around making the most libelous remarks--said that Colby received a commission on all appropriations or gifts--they were terrible false statements. And I said to Bill, "You have good reason for a suit." And he said--what is that remark about a skunk?--that if you're having trouble with a skunk, just get out of the way. [Laughter] Because everybody knew this was so improbable as if to say I was stealing cars or something.

Adams: He was really the father of the state parks, which is an extremely important fact of history. He dedicated an awful lot of his time and energy to that. He had unlimited energy. He was a total constructive extrovert.

Teiser: He was interviewed by the Oral History Office,* but only a small part of the interview is on the Sierra Club.

Adams: It was an important part of his life--tremendous.

Teiser: He was an attorney, wasn't he?

Adams: He was a top mining lawyer.

Teiser: What was he like? Was he an outgoing--?

Adams: Oh, marvelous person. Very big, very tall, sort of massive--an extremely generous, direct person.

Teiser: He headed the outing committee?

Adams: Yes, he ran the outings; that was his main fun. He was the secretary of the club, then became president. Then he settled down and became secretary for many, many years. They just automatically reelected Bill Colby secretary. He had everything at the tip of his fingers, and when the club was small, he had his law office upstairs in the Mills Building, eleventh floor, I think, and the Sierra Club office was just one office about as big as our gallery--a standard one-room office on the floor below. Nell Taggart was the assistant secretary, and she ran the whole clerical business--letters, the membership, etc. Of course, they had lots of volunteers. The club always has; couldn't have existed without that any more than our Friends of Photography can.

An organization of that type really depends on volunteers. Like our hospital here. If it wasn't for the "pink ladies," they'd have a difficult time. They not only help with the records and admissions, they help the patients, they clean, they work at the coffee shop. So any organization like the club has always been full of volunteers.

Teiser: It's had an increasingly larger paid staff, though.

*See interview with William E. Colby, Reminiscences, Regional Oral History Office, The Bancroft Library, University of California, Berkeley, 1954.

Adams: Oh yes. Now it's gotten to the point where the volunteers are primarily in the chapters. The club's too big for volunteers. Well, we have people to do some things, but now it's so big, they could hash things up easily if they weren't extremely careful, because there's so much to know.

It's been losing membership lately, though. We don't know why. Take such issues as Vietnam and population control, and some people resent that; they think that other organizations are better fitted to solve those problems. And I'm inclined to agree. I don't believe in an "across the board" program. I have my privilege of believing and doing what I want and joining what organizations I want, but I really feel the Sierra Club's got an environmental mandate that includes pollution and would include many things we never thought about in the earlier days.

But I still think they get far afield when they get into difficult political situations--abortion and overpopulation, all that. It's just like the nuclear power plant business. The board is divided on this issue, as are the scientists.

I must say a lot of people have very strong opinions now; a sort of latent hostility. They take it out in espousing activist causes without really knowing what they're doing. That fundamentally bothers me.

We've always had a bunch of nuts in the club, anyway. Always a certain fringe, a really small percentage, but enough to cause trouble. That exists in any organization.

Teiser: I just took down the 1928 officers. It's as good a list as any of the people active through the twenties. Duncan McDuffie was president--

Adams: Well, he was an extremely great gentleman, a very fine man, very intelligent. He was president, director for many years, but one year he wasn't elected! You see, that's before we had a limitation on the term. That's why people like Leonard and Colby and Walter Huber and Joe LeConte and Clair Tappaan and [Robert M.] Price and all those people--Lewis Clark--kept going and going and going, year after year after year. They were all wonderful and all helped, so that it was good, but it finally came to the point that it wasn't a democratic way of doing things, that other people had some rights to run the club. So we established the two-year term. And since then you have to be off the board a year before you can be reelected.

Of course, if that had happened during the Colby days, it would have been very bad for the club, because there wasn't anybody who could take his place--his great ability to work with all kinds of people and groups. It was really pretty impressive.

Teiser: Phil S. Bernays.

Adams: Yes, he's a great old man. He's still living [he died in 1976]. He's of the old school. I don't know just how really effective he was, except that he was a very charming man and always espoused the helpful causes. He was a great conciliator. He very deeply resented Brower's shin-kicking, as we call it. And, looking back, we accomplished a great deal by what is called gentlemanly persuasion--sitting down and talking together. It worked most of the time. Sometimes it didn't, but there wasn't an acrimonious attitude.

Hetch Hetchy

Adams: We lost the Hetch Hetchy. And one of the great disappointments there was Gifford Pinchot's support of it. He really turned the trick with the secretary of the interior, although he was in a different department. People forget the Forest Service is primarily a commercially-oriented, really a controlling administration, that apportions the timber, and keeps it going as a natural resource, but is primarily interested in harvesting and cutting. It's just recently that they've been stressing "multiple use" for political reasons. The multiple-use principle sounds very fine, and in many ways is all right. But when you get into very beautiful areas that should have park or wilderness status, it doesn't work. You can't have lumbering and timbering and mining and grazing and recreation all together. I mean, it sounds good, but it usually doesn't work. We'll come around to that, I guess, in greater detail later.

Teiser: You mentioned Hetch Hetchy.

Adams: That was about 1912.

Teiser: By the time you came into the club it was all settled--

Adams: Finished. Completed.

Teiser: Was there continued resentment about it?

Adams: Oh yes; there were many things that happened. You see, the resentment was very well founded. The Raker Act specified that the city [San Francisco] would generate and distribute its own power but could not sell it. Well, of course, that's been violated from the very beginning--the PG&E buys all the power and distributes it. It was absolutely ridiculous to think of a city putting up parallel

Adams: power lines. People are still thinking of that, you know, because they've just got it in for the PG&E. I personally think that the PG&E has done a wonderful job. They're so restricted and controlled as it is that they're not really a private organization. They're really a public utility with thousands of stockholders, and they've kept pretty much to the grindstone. And according to law and agreement, they have to look ahead and--like the Highway Department--they have to study future traffic, use, development. And they have to say, "Well, there are going to be one hundred thousand more people in this area. Now, we have to prepare for the required power. We can't wait until the one hundred thousand people come." So that's why these new plants are planned and built. They look at their charts and their census, and they discuss it with the state or the federal government. They find that there's to be need for more power in a certain number of years; this curve is rising, and they have to start building. Every plant they've put up has nothing but opposition. The Point Arena plant is now having trouble, and it doesn't make any sense, because it's not in an attractive place. It's a perfectly logical place for a power plant. And it's an absolutely nonpolluting kind of power.

But the "no" people are right there! Of course, they're afraid of atomic energy, which I think is--I really think it's ridiculous, I think it's the only sure power source. As a good scientific friend says, "What else is there?" Until we get adequate solar power or fusion. Now, if the government will fund a multibillion-dollar crash program to develop fusion power, we might be all right. We wouldn't have any trouble with fusion because that's clean. But that's a technical breakthrough that is yet to come--although they've made very big strides lately.

Teiser: Mr. Richard Leonard told me he was in favor of taking Hetch Hetchy dam down.

Adams: Yes. That's one of the craziest things I've ever heard. Where we going to get our water? That's San Francisco water. I can't understand Dick on that. I mean, he brought that up at a meeting, and I said, "Well, where are you going to get your water? In San Francisco that's our water supply." And there isn't any other source; there's nothing in the coast range that can provide it.

"Oh," one of the people said, "we can put a desalting plant down the coast." And I asked what kind. "Atomic." And I said, "But just this morning, we passed a resolution against an atomic plant of any kind on any shore, river, lake, ocean, or pond in the hemisphere. Now, four hours later, you say we'll put a nuclear desalting plant in!"

Adams: I think taking the Hetch Hetchy down is--I cannot understand it. It's crazy! They'd have to put in another dam to store the water. But where? San Francisco is a big community. The Russian River was once considered. You see, what happened at Hetch Hetchy was that there was another site further down the river that would be much bigger in expanse but not so deep. And we worked for that very hard, but that could not provide enough power. There wouldn't be enough "fall." And the other thing was, it would be of such great area that the evaporation would be a very serious problem. You see, it would have to be lower than the floor of Hetch Hetchy, which is about thirty-six hundred feet. It was claimed that they could pay for the operation of the Hetch Hetchy by the power it would produce. And you know if you've been over the Pacheco Pass and seen the San Luis Reservoir, that the water's pumped into the dam. There isn't enough local water there to fill a bathtub. I mean, it's a very dry, arid country except for an occasional heavy runoff from storms.

They have a power plant there, and the water flowing out of the dam to the forebay creates power, which provides about 50 percent of the cost of pumping it in. That's a perfectly logical plan.

But the whole Hetch Hetchy was put where it is, in the Hetch Hetchy Valley, because of the favorable power situation. It's a long and sad story.

Teiser: After Hetch Hetchy was done, how did those people who had fought it feel about it?

Adams: Well, there was nothing they could do. They accepted it; it was done. I remember thousands of people fought the Golden Gate Bridge. My mother used to think it was "just terrible, ruining the Gate." Well, the bridge is up. I personally don't think it was so bad. I think it's a very majestic structure. The Bay Bridge is certainly marvelous, but a lot of people fought that. Of course, a lot of people just fight for the hell of it, just to fight something. And I was guilty of many, many positions myself. I'd go right along with opinion, because my friends did.

Atomic Power Plants

Adams: I came to this dilemma on the meetings with the club over atomic power. I'm not a scientist; by no stretch of the imagination can I be considered a fraction of a scientist. So when the vote came up on an atomic power issue I had no real right to vote. I abstained. [If] I knew there's somebody there I trust [who] knew more than I did, I would go along with him, as an expert.

Teiser: Do you think that a club like the Sierra Club shouldn't make that its business?

Adams: Well, I think in the first place, if it concerns pollution and destruction of the natural scene, it certainly should. But they shouldn't make judgments on uneducated opinion. In other words, the club should have gotten a special panel of scientists, you see, and taken their majority opinion. Because very few people in the club know anything about it. I don't know anything about it. When my scientific friends are for atomic power, I trust them, and I think they have enough knowledge to make a valid statement, and I can follow them.

Teiser: What would be the mechanics of getting expert opinion? Would they get a fund for a study, or--?

Adams: Yes, you'd have to do that. Of course, there have been many studies made at certain locations. You go to Stanford and you have [Paul] Ehrlich and a few extremists in that area and you go to somewhere else and find other viewpoints. We find that when the club has asked for studies, they've usually gone to the places that they know they're going to get a certain favorable response [from]. That's happened time and again. Now, getting an impartial response is something else. So theoretically they should have taken a scientist from MIT and from AEC [Atomic Energy Commission] and from Harvard and California and Chicago--maybe twelve people that would be invited to join in a panel, primarily by correspondence if necessary. Have a mediating group of nuclear physicists who could know what they're talking about and could interpret it. Then get their opinion. And if three out of eight said atomic plants are no good, well, we'd be favorable. If eight out of three say they're dangerous, we'd be unfavorable!

You see, here's a situation which is a very bad thing. It shows how people can be really fundamentally dishonest at times. We've fought very hard to get PG&E off the Oceano Dunes to protect the state park. PG&E said, "Fine, we'll consider this and we'll do something about it." And Doris Leonard, I think, was very important in talking to the executives. They agreed. "We have to have this plant. We have to find another location." They went north beyond Pismo Beach and chose the Diablo Canyon site, and the club approved of that. Instantly, along comes a group within the club against Diablo Canyon. "The most beautiful canyon on the coast"--a gross exaggeration!

There were certain characters like Martin Litton and others who just took Diablo Canyon as a challenge and said the Sierra Club betrayed conservation and ruined this beautiful canyon! And they made special photographs of the oak trees, etc. It isn't the

Adams: camera that lies, it's the photographer. So they made it out that this was really one of the most extraordinary places on the coast. Well, it was a nice little canyon, but there are scores better. I've seen many real, not motivated photographs. And while I regret having any beautiful spot spoiled for any purpose, at least they took the proposed plant off the state park Oceano Dunes, which are very beautiful, and put it in this remote canyon; they had to go somewhere. But of course many claim we don't need any more power. We said to one of the directors who made such a fuss about this, "Did you walk in to San Francisco from Redwood City this morning?" Of course not, he came up in his Buick with one person in it. When the power goes off, they're the first ones to complain. So I have a very sour impression about such unreasonable people.

Private Interests and the Public Interest

Adams: Now, in the earlier days they weren't quite so unreasonable. There was more unreason on the other side. I knew some business people in Visalia and Fresno who would say, "There's too many parks. We shouldn't have any parks. Yosemite Valley's all right, but you're strangling the cattleman and the rancher; cutting him out of his livelihood." Well, to a certain extent, the park and wilderness areas have caused serious loss to the cattlemen. But with the advent of the feed lots, they now have no leg to stand on. Because the animals are raised for a good part of their life in very well controlled pasture and then put into feed lots and stuffed. Now, for sheep, I've been told it's no longer economical to run sheep into very high country. When Muir came, the Sierra was just absolutely infested with sheep, and they tell me that the damage is not yet repaired, that they created such fundamental damage to the ground cover that what we see in the Sierra today is pretty much the result. The meadows must have been quite different in the fifties and sixties before they started running sheep. Of course, hunting is another thing--we feel we probably have the privilege of hunting as part of the American dream, but I'm a thousand percent against it. The hunters were very much in opposition to parks and to wilderness.

You have a very protracted, continuing opposition to this, and you have it often come up in Congress. There have been several worrisome bills presented. One was that all government lands should be administered by the nearest township. That would mean Yosemite would be run by El Portal! And another one is that the government should sell off government land to private interests! That bill was actually presented. It didn't pass, but there are a lot of people that feel that way.

- Teiser: Were the national forests used at all to reconcile those people?
- Adams: Well, the national forest is valid, only in the sense that it's controlled. You see, grazing and all other use is by permit. And just like trees, the ground cover is a resource, and just so many cattle can use it. If it's over-used, it's ruined for quite a while, maybe forever. So, the Forest Service controls grazing and lumbering and, of course, mining is a fundamental privilege that goes somehow with the land, like water rights. The Hudson family here, I've been told, owns the mining rights to enormous amounts of country around here. They just bought the mining rights, just like you would the oil rights. A lot of people did that to protect the land, because quarrying is part of mining. I could go to a person's land here that might have an attractive bluff and say, "We're going to have to protect this. I'll buy the mining rights to your property." And for a hundred dollars or a nominal amount, I could buy that and perhaps give it to a trust and nobody could exploit it. No matter who owns the property, the mining rights could be owned by others.
- Teiser: So individuals own mining rights in the national forests?
- Adams: No, they can't in the national forests, only in private lands. Unless you had mining rights to begin with, then the Forest Service might take them over. That gets pretty complicated legally.
- Teiser: The Forest Service allows mining in the national forests?
- Adams: Yes, I believe so, in appropriate situations. And the national monuments, under the national parks, have to carry mining rights. A national monument, by law, cannot preclude mining. You can still mine in Death Valley. I can go in there and stake a mining claim. But I can't open a resort.
- Teiser: But the basic philosophy of the national Forest Service is quite different from that of the National Park Service?
- Adams: It's tremendously different and it should be clarified. Very few people realize what the difference is. The National Park Service is for preservation of the natural scene for the enjoyment of the people, and they use the word "re-creation" as well as "recreation," and nothing can be done in a park of any commercial nature except under contract. Concessioners operate under permits. You can't even collect pine cones!

Now, the Forest Service is an institution which is designed to protect and control many natural resources. In the early days when my grandfather was a lumberman in Puget Sound, forest harvesting was severe; they completely denuded the country. I remember flying

Adams: twenty years ago over Vancouver Island. It looked like there wasn't a bush for hundreds of miles. It seemed completely logged out. There was an unlimited amount of timber in early days, so they just never thought anything of it. Then Gifford Pinchot came on the scene, and he realized the whole forest resource of America was going down the drain; that in a matter of a few years there would be little left. So the Forest Service was established. You have to remember that this cutting was on primarily public domain land, and there were no restrictions. I don't even think people had to get permits. They would buy up vast tracts for nominal amounts. The railroads did that, such as the Southern Pacific and Union Pacific, acquired millions of acres, which they sold or leased to lumbermen. It's all very complicated.

Up in northern California the redwood groves were privately owned; they never were under public domain for many, many years. They were bought out very cheaply. And that's why the Forest Service never had influence there. There is the Mendocino National Forest and a few other areas, but most of it is privately owned. So when the state parks were formed and the Save-the-Redwoods League became active, they bought much land from the private owners. They usually got along fine. They said, "We wish to establish a grove or a park, and we have a million-dollar pledge, and we want to buy this timber. We'll take all you can give us." And they'd sit down and have lunch or drinks and negotiate. The Save-the-Redwoods League has done the greatest single job of conservation with the least acrimony. Some very contemporary activists in the Sierra Club think the Save-the-Redwoods League was responsible for a great loss of redwoods. Being totally unrealistic about the whole thing. Some think you can simply take those areas and put them in parks. Well, you can't. You have to pay for it, under the principle of eminent domain.

The tragedy in the Redwood Park is that we had a very fine location--sixty-something thousand acres--all ready to go, and then I must say my friend Dr. Wayburn and a few others said that wasn't enough, they wanted a hundred thousand acres, and they threw a monkey wrench in the procedures. The lumber people caught on and started cutting into the best areas, and finally we ended up with what is now, for me, an inferior park, instead of the superior stands, which you might have had if the first plan had gone through. The several years delay was a tragedy. Another tragedy is that the government can establish a park like Point Reyes National Seashore and the Redwood Park, but they don't appropriate money. In the meantime, the land value goes up. So when the government does get around to buying, they're paying three or four times as much for it as they would have at first.

Adams: Now I think there's some law being invoked that when the government once designates an area, the value at the time of determination holds, plus a logical amount of interest which would accrue if there were a delay in appropriations. Do I make myself clear? And those things are very important. The Point Reyes Seashore lost some very valuable areas. They can come and take my house, but they have to pay me the appraised value. Eminent domain is inflexible. If they came and said to me, "I offer you X dollars for this property," I can say, "No, it's worth more than that." So I take it to court, and then the judge can either agree with the proposed value or put a new price on it. But no matter what happens, when that price is determined by the court, I have to give it up. There's no way I can hold it.

Now, the only law that is a little "aloof" is the homestead act. There were many property rights in Yosemite, such as around Lake Tenaya, and I think the Sierra Club property in Tuolumne Meadows was homesteaded, so they were automatically excluded from the acquisition of the park for the lifetime of the owners. They can't be touched; I think that's part of the homestead law. And I think a homestead cannot be taken for bad debts. I think a homestead is an absolutely secure situation, which was based on the fact that a man and his family go west to start a farm and he homesteads his land. He's got that asset; nobody can take that away from him--any more than if I went into bankruptcy, they couldn't take my cameras. A carpenter can't lose his tools. He can't be deprived of his means of livelihood. He can lose his house and his sofa and his liquor collection and everything else that he owns, except his clothes and his wife and his tools. They are safe, and that's in a way the principle of the homestead.

Teiser: During the twenties, one of the campaigns the Sierra Club was fighting for was for acquisition of private lands in the national parks. Were there lands in Yosemite that were then brought into the park?

Adams: Oh yes, many lands. All around Tenaya Lake; the club got those for the park. We got some of the land at Wawona; I don't know how much, but there's still a great deal of land at Wawona that's not in the park.

Teiser: You say "we got." Did the government appropriate money for it?

Adams: Well, what the club did in many cases was to buy the land and hold it for the government when it had the money. It was a risky thing. It's what the Nature Conservancy does. They'll go to somebody and say, "We need \$5 million to secure this parcel of land. The state is interested and the government is interested, and if within a certain number of years they don't buy it, then we will sell it."

Adams: In other words, they make the attempt. We tried to get them to buy the artichoke fields down here, but there's too much money involved. In other words, the state or the county couldn't possibly afford to buy it for what it was worth. Now, Tom Hudson sold twenty-seven acres of their property to the state, adjoining Point Lobos, for \$4,500,000. Well, that was understandable; that was increasing an important area. And then he donated many acres on the other side of the road. But he'd put that property up as collateral--option money to try to save the artichokes. He really did a wonderful job of trying to save some of our land, and almost went bankrupt. The bank was very helpful. The bank, by law, had to foreclose, but they invoked some kind of regulation that permitted him the time to sell it to the state, which was a good thing. The state got it at a pretty good figure, and he gets out off the hook, which is fine!

We did somewhat the same in several areas--I forget where they were. Then, of course, the McCauley property was available at Soda Springs, and the club thought that they should buy that to protect it, because it was in Tuolumne County and was outside the park. Anybody could come in and start a development. Then by law they had the rights of access and the rights of water. The city of San Francisco was concerned over that.

San Francisco, after Hetch Hetchy was established (to go back to that for a minute), wanted to close the entire Tuolumne watershed to traffic, as a dangerous possible pollution hazard to the San Francisco water supply. Well, that would have involved about half of Yosemite National Park! There was a big fight. Of course, we won on that. That was a public issue, because it was conclusively proven that the pollution was minor, and the water had to be purified anyway.

Teiser: Well, that's another case of incompatibility. People and water supplies, like cattle and recreation.

Adams: Now there's no stream in the Sierra that's safe to drink out of! We used to think nothing of going up to Merced Lake and camping by the river and drinking the river water and other streams--then the purest water in the world. You can't do it now; there's just too many people in the area.

Teiser: Do all these people have to bring their water in?

Adams: You have to boil or chlorinate your water or otherwise treat it. A lot of people don't do it. Mr. Colby, in the early twenties, got ptomaine poisoning somewhere near Reds Meadow. The water had perhaps run through a cattle or sheep camp. So you can get these bugs anywhere, but now it's very serious.

Adams: The club bought the Tuolumne Meadows property on the basis of certificates. A number of people put up \$100 each and got a certificate of part ownership. And that gave us the required money. I forget what it was. I shouldn't be quoting, because I don't know. I think it was 250 certificates--\$25,000 in all. Some people thought it was very extravagant, but we got this whole section of land. The whole idea was to hold it until we were sure that the government could properly operate it. Now, we had a very sharp superintendent once, who wanted to put the Tuolumne Meadows Lodge right on our border thinking that it would bug us into getting rid of it. We saw what the motive was, and we took it to Washington and stopped it because it was such an obvious trick. The lodge didn't belong there; it was just a bureaucratic ploy, you see.

Believe me, there's been plenty of monkey business in the Park Service and the Forest Service. What's going to happen is always a political gamble.

The Sierra Club and the Government

Teiser: In going over the Sierra Club Bulletins of the twenties, it looked as if a lot of government officials were great friends of the Sierra Club. They'd come to camps--

Adams: Yes, that was a very important thing. That leads to the immediate present, or the last seven or eight years. In the early days we did have a very fine relationship, especially with people like [Stephen T.] Mather, and the early directors and secretaries of the Interior, and the Forest Service people. They knew what we stood for. And we'd voice our opinions very strongly, and we'd offer help, and we'd make studies for them, and all kinds of efforts to come to conclusions. Sometimes we lost, but everybody was on a first-name basis. There weren't any nasty things going on. Oh, once in a while there'd be a doublecross, but it was very rare. Leonard was very fine at negotiations. Bestor Robinson was a very important man for many years, and he was our liaison man with the Forest Service.

Teiser: How did he happen to achieve this?

Adams: Well, he was a lawyer who I think had clients with lumber interests and advised the Forest Service. He was terribly interested in conservation, and he understood the Forest Service point of view, and he knew when to stop. He would say, "The Forest Service has its lawful obligations, and I'm trying to get them to see the light

Adams: in this case, and please don't butt in at the moment. I think I've got it under control." And we'd agree. He could talk to these people, and as a rule he accomplished an enormous amount.

[End Tape 25, Side 1]

[Begin Tape 25, Side 2]

Teiser: You were saying that Bestor Robinson was a man of importance.

Adams: Well, he was accused by many of the more activist members of selling out to the Forest Service, and a lot of things which were not true. He was very definitely attempting to try to bring us together, and he did, and he had, I know, a high order of mutual respect. The realities of the situation are that the people who own property and are in business are naturally going to protect their interest, which relates more to those people I've mentioned, more to the business types, and in very many cases in opposition to the Interior Department and the National Park Service.

Now, [Harold] Ickes tried to combine the Forest Service and the Interior into a new department called the Department of Conservation. I was all for that, and a lot of people were, and then we finally realized that it's good to have two enemies in adjoining houses rather than in the same apartment. [Laughter] I mean, you really couldn't reconcile the two, because the word "conservation" covers a multitude of sins. It's a very bad word in many cases because it's so broad. Bestor, time and again, would have meetings with them, authorized by us. He would arrange meetings. I remember many times when Colby or someone would call up--this was in the thirties or forties--"We are having lunch with the chief forester. Can you come down?" Well, I come down; we sit and talk. And he might be pounding on the table, but always with a twinkle, everybody with first-name status, and we'd all leave friends. Well, that went along fine until Brower got in as executive director.

He worked wonderfully for Dick Leonard for a year or so. Dick thought he was the greatest thing that ever happened to the club. We all did. I was instrumental in getting him in. He gave up a big job with tenure at the University of California Press. He really is a highly gifted man, there's no question of it. But then he began to get the aggressive bug, and gradually went down the accusation road, and would bring in personalities, making very bold statements that weren't always factual. And these people finally pulled away; they wouldn't talk with us.

Teiser: Was Bestor Robinson one of them?

Adams: Well, Bestor Robinson left. He was very much in opposition to Brower when he started that tactic. But these people in the Forest Service and the Park Service and the state, they wouldn't talk to the club people any more because Brower represented the club in the most aggressive, what we call shin-kicking way. You don't sit down to talk business with somebody and then kick them in the shins, call them S.O.B.s and then say, "What do you want? You can't have it." That attitude is terrible!

That's why the Mineral King got by us. We never knew anything about it until it was formally announced. Now, in the earlier days the Forest Service would have discussed that with us. We had discussed for many years the development of ski areas, and Mineral King was discussed as a ski area. The difficulty was the road-- that's one of the main problems. You can't desecrate the country with new roads, and of course it is usually too expensive.

There was dead silence for six or seven years. Then they come out with the Disney plan--a bombshell. It never would have happened before. And this occurs over and over again. And even Dick, to some extent, has been a little hypnotized with what he calls "Brower achievements" like "saving" the Grand Canyon.

Well, Brower did a great deal. It's by no means a settled situation, I assure you. One of his basic principles was to seldom give credit to anybody else working on a project, and that rankled with other associations. You suddenly find out that here's two or three more important organizations who are working along the same lines, but he never would admit it.

The Park Service and the Forest Service

Teiser: I've been reading a little about Stephen Mather, and it struck me that there were some parallels, and some contrast too, between him and Brower.

Adams: The only way you could say they were alike is that they were extremely forceful and direct action people. Mather was a very, very fine man and was very wealthy. He dedicated himself to the Park Service. He did found it, in fact. He was the first director. And he's the one--you see, [it was] proposed that the Park Service should invite business firms to operate the public service. Mather was very much for that because he was a free enterprise man. I frankly think government operation would have been best. It would have solved a lot of problems, but it also would have invited a lot more. He felt that they should encourage capital to come into the

Adams: the parks and provide the services and operate under strict supervision. And being a very honorable man, he assumed the people he would get to do that would be equally honorable. I think most of them were; some of them were not. But there was no doubt as to who directed the parks.

There's a very wonderful story about the Glacier Park people, when they built the hotels and the lodges. Mather was indefatigably, constantly touring, checking everything himself, you see. So they opened the chalets at Glacier National Park, and he approved, said, "It's fine, but that shed's coming down, isn't it?" They said, "Oh yes, it's temporary." He said, "Well, get it out before next season." He came around next season, in the spring, and the shed was still there. He said, "I thought you were going to take that out." He said, "Well, Mr. Mather, we just haven't been able to get around to it." He said, "Well, I insist that it be out without delay. It's an eyesore. Get it out." He came around in the fall and the shed was still there. He called the trail crew. He said, "Bring some dynamite, put it under that shed, and blow it up."

"Mr. Mather, is that really legal?"

"We'll decide that later. Get that shed out. Two hours from now, that shed isn't going to exist." And it didn't. They blew that thing to "Whew!" [Laughter]

From there on, they realized he meant business. They could have sued him. Now, there would have been all kinds of legal problems, "due process," etc. But he gave them the warnings. It was of no consequence. It was just an ugly shed, maybe as big as this room. But ever since then, they had a tremendous respect for him. When Mather said something, they said, "Yes sir!" [Laughter] Went about and did it. He had very high standards and, I think, did a very wonderful job.

Teiser: Do you remember him at Sierra Club events?

Adams: Oh yes. He went on outings of the Sierra Club in 1927. I saw him several times. I had letters from him. He was very cordial and very firm. Francis Farquhar was his assistant and chief accountant for the Service. And Farquhar, of course, could be dynamite too--too much so, sometimes.

There's a wonderful story about Farquhar and old Dr. [Kaspar] Pischel. Dr. Pischel was a famous eye, ear, nose, and throat man in San Francisco. A very sturdy, wonderful, erudite man--had a white beard. Used to go around in--what do they call that?--lederhosen, those leather pants. Great hiker, brown as a berry, and that white beard! So here he was in his little abbreviated

Adams: leather pants, way up near Cold Canyon, in the northern part of Yosemite Park, and along comes the district ranger, who arrests him for not wearing the routine attire. There must be a sleeveless shirt (it's in the park regulations, believe it or not--the equivalent of a sleeveless shirt) on the trail! And of course Pischel was spluttering like a bunch of fireworks. The ranger said, "Sorry," and gave him a citation. He said, "I can't take you in, but you'll have to report to the headquarters when you get back."

Along comes Francis Farquhar down the trail. Pischel is spluttering and Farquhar says, "What is this?" (It was Ranger Danner, I think.) He says, "Mr. Farquhar, I'm sorry, but this man is violating park regulations. He's not properly dressed." Mr. Farquhar says, "I think it's a very strange thing in the wilderness that a man can't go out without wearing a shirt; in fact, I'll take mine off right now if it will make you feel any better." Danner said, "I'll have to give you a citation." Farquhar said, "By the way, do you have your credentials with you?" Danner didn't have his star! He didn't have anything! He didn't have a scrap of paper to show he was a park ranger! [Laughter] Farquhar said, "You're absolutely without authority. You can't make any arrest of any kind without your credentials; you have nothing to say." So Danner went back to Tuolumne Meadows and that was the end of that, although Farquhar, I think, brought it to the attention of the director of the National Park Service as a ridiculous interpretation. They applied the regulation in the midst of Yosemite Valley in crowds, they wanted people to have--although now people go around in bikinis, practically. But at that time it was a regulation, and this man was interpreting it rigidly. It was so funny!

And it's the truth, you know. If an FBI man comes to talk to you, and if he can't show you his card, he has no authority. I have a press card (I'm on the ASMP [American Society of Magazine Photographers]), and I can go to a news event, if there's something happening, and I can show my press card. But I can't say, "I'm a member of the ASMP and I have a card." Which is right. You can't drive a car without a license, and so on.

The first ranger group was a very fine, specially selected group of people. Some of them came from the army, I guess. Chief [Forrest] Townsley in Yosemite was a real character and did a wonderful job. And the rangers in those days were really rangers in the sense that they were trail riders, woodsmen, and lawmen in the best sense. They were after poachers and many hunters and stock men who'd try to get in on the fringes of the park. And they'd get caught. The rangers would fight fires and take care of people in emergencies.

- Adams: The ranger now is pretty much a briefcase man who must have a degree. He's sort of a sublimated police officer plus naturalist. And they've had some trouble getting rangers to staff the outposts because they don't know enough. It's very seldom that you find a man who can really be a ranger in this sense of the word, who goes to Merced Lake or Tuolumne Meadows--a district, as they call it--and [can] run that district, and know all about fire and all kinds of problems that are both wilderness and human problems.
- Teiser: Did Mather set the standards for them?
- Adams: Yes, Mather set up a marvelous organization. You see, that was under [Woodrow] Wilson. And this is typical of what I think is a good administration. Wilson was very much of a Democrat, Mather was a pure Republican, but he'd always had an interest in conservation and proposed the Park Service, and Wilson listened to it and thought it was a wonderful idea and said, "All Right. You direct it. It will be set up in the Department of the Interior." It was a crossover of political lines. And in a sense the Park Service has kept pretty intact. Basically they're very good. They've fired a lot of secondary people to fit party lines, but the directors, as a whole, and the superintendents and the top staff group--they've been relatively untouched. Probably the cleanest bureau there is.
- Teiser: Who was in charge of the national Forest Service during that period?
- Adams: I forget whether that was Pinchot or whether he'd died. But he set up the basic organization, a very capable one. It's part of the Department of Agriculture. They still have the chief forester, and the regional foresters, and the actual forest chiefs of the many national forests.
- Teiser: Has it developed as strong a tradition, however, as the Park Service?
- Adams: It's much more powerful politically. It relates to far more people. Far more people visit the National Forest areas, I'm told. And they do an excellent job with their campsites. I think they're a very admirable crowd of people. Their ideals aren't the same. But thank heaven we've got them, because they have listened and have followed on pretty well with the wilderness bill provisions, with certain obvious exceptions because, after all, their job is to protect and develop commercial forests.
- Teiser: When Horace Albright succeeded Mather, did he continue--
- Adams: Oh yes, Horace is one of the great people. In fact, I suppose--well, Mather remains the top man. He's the instigator. As his memorial plaque says, "We'll never know the good that he has done." Albright

Adams: really carried it on in the most noble way. Albright was practically mentor for the Rockefeller sons. Old John D. entrusted the boys to Albright in many cases--outdoor life and counseling. In some questions of taste, I would say Albright was probably deficient. Everything he did, he did with the highest motives, but he did some questionable things, like putting roads across the middle of meadows so that people could get the greatest views. Nobody knew then what the impact on the meadow was going to be, so many of those roads are coming out. You can't blame people for doing those things that they felt were the best thing to do. His motives were always of a very high order.

Teiser: He did not remain in that position long, though, did he?

Adams: Well, he was superintendent of Yellowstone. Then he came to Yosemite, then became director. Now, I'm hazy as to whether he was director before or after his superintendencies.*

Teiser: After. After Yellowstone, anyway.

Adams: Yes, but I don't know whether he came to Yosemite as an emergency fill-in or not. Then of course he resigned and became president of the U.S. Potash Company, which I think Mather was affiliated with in some way. Mather represented the Borax people--Twenty Mule Team Borax, for example.

Teiser: How did Albright happen to resign after--?

Adams: Well, I think he just had to look for himself, his future. He did his job and then got to be president of this huge company with offices in Rockefeller Center and worked for the Rockefellers too on other things. And I think he did pretty well for himself--I hope.

Teiser: Did he prepare a successor for himself, as apparently Mather had prepared him?

Adams: Oh yes, the Park Service prepares. The Park Service has rarely brought people in from the outside. They move up from the ranks. And there was Arno Cameron. Quite a number of very fine men were directors. Some men had more imagination than others, but as a whole they were good. We have a live wire now in [George B., Jr.]

*Horace Albright was superintendent at Yellowstone from 1919 to 1929 and temporary superintendent at Yosemite in 1927 and 1928. He was director of the National Park Service from 1929 to 1933.

Adams: Hartzog, who is getting great opposition because he's being firm about things. I always got along very well with him. I always got along well with secretaries of the interior. I think, as a whole, it's been pretty good. Secretary Albert Fall was a big catastrophe. But [Harold] Ickes certainly was wonderful.

Teiser: But didn't Fall actually do some good things for the--

Adams: Yes, he did. He was all right in conservation. But he got caught in that oil scandal.

[Oscar L.] Chapman was a very good man; he was a power man. His concern was primarily power, like the Columbia River developments. But he had good sense in appointing the park people. You see, you have the secretaries, then you have the undersecretary who is in charge of certain divisions. An undersecretary will be in charge of the national parks and the Biological Survey, and another undersecretary will have the Bureau of Indian Affairs. It goes down to the regional directors, then to the superintendents.

Teiser: You had a good deal to do, at one time or another, with Ickes, if I remember.

Adams: Oh yes, I was appointed photo-muralist for the Interior Department. And from the point of view of rank, that was very high; actually, I outranked all superintendents and even regional directors!

Teiser: Is that right!

Adams: Not in the money sense. It was only a matter of being on the books. But I could go to any park and commandeer a truck. I say "commandeer;" I could say, "I want a truck. I need help." I was working for the secretary.

My funniest story is when I once got to Boulder Dam. The secretary asked for a real good picture of Boulder Dam. I went to the director of the whole business down there, and I said, "The secretary wants a knockout picture. What I'd like is, with your help, to pick the ideal location, and I'll arrange the photographic setup--get the right lens and everything. We'll really make this an outstanding picture." I said, "I'd just like that wonderful aspect of the dam where you open the spill gates and see the great arches of water."

This man put his hands to his head. He said, "You know what that means?" I said, "No." He said, "It means at least a month's preparation. I have to send a notice to every water user below here to the Mexican border that there'll be so many million acre feet of

Adams: water released. The dams below here will have to reduce their capacity to take over flow. That has to be planned." He said, "It'll cost somewhere near the order of \$50,000 to \$75,000. Does the secretary know that?" I said, "No, but he will. I can't be part of that." [Laughter] And Ickes understood. I wrote a letter and I said I wanted to get this picture with all these plumes of water, but when I heard what it represented in water and reclamation, I said I think we'd better forego that. "I've got to hope for the secretary's agreement. It would be an unwanted extravagance." [Laughter]

Teiser: Was Ickes a good conservation man?

Adams: Oh yes, one of the greatest. He was a--what do they call it?--a curmudgeon? Because he could really be tough. One of my most extraordinary experiences in Washington was going to a dinner given by some organization--I forget what it was--at which Ickes and Henry Wallace were to debate. They both gave a short address, and then there was a debate. And you wouldn't have believed it; I never heard such vituperative comments from both sides. It was outstanding! I mean, everybody was sitting there goggle-eyed. When they got through, they got up, shook hands warmly and left. [Laughter] But it really was vituperative. "Not only do you not know what you're talking about, but you have no intention of telling the truth on this matter."

"My dear Mr. Ickes, I have always considered that it was possible to talk to high government officials in our departments, but any semblance of courtesy which I expected is completely lacking."

"My dear sir, I consider you really beneath the floor."

And they went on that way for an hour, you know. [Laughter] And of course Wallace was a conservationist too, but had an awful time with his Forest Service undersecretary. It's a very long, complicated story which I just don't remember and I have no authority to talk about because I know only a little of these things.

Teiser: There's a story about Ickes having met with the board of the Sierra Club about the Kings River in 1938 and getting mad.

Adams: Well, as I remember that (I had nothing to do with that) they had this meeting and he came, and a couple of members of the board took the occasion to openly criticize him, and he claimed that he'd come to talk about the Kings Canyon and that this wasn't a public hearing, and that he resented the inquisitorial attitude on the part of these people. And I think he was quite right. I mean, he was all full of

Adams: fire. He went east and he talked to senators and congressmen and tried to promote the idea. But this wasn't the time to criticize him for other things--nothing related to the parks. But we had our fanatics then too. And Farquhar was very much against Ickes just because he was--I don't know--perhaps a Democrat!

And I one time got up and said to the Sierra Club board, "In view of the fact of what Ickes has done, and supported conservation for so long, we should send him a letter of appreciation." Farquhar opposed it very strenuously, saying that no public servant needs a letter of appreciation for doing his duty. And I was not alert enough to pound on the table back and say, "I insist on a vote." So many people came up afterwards and said, "I'm so ashamed I didn't speak up. But what in the world was the matter with Farquhar?" Farquhar just had those strange acts of intolerance every once in a while. There's probably a psychological reason for them.

I think this is going fine. We're getting a lot of ideas.

Teiser: Yes. You had, I guess, a fairly active part in the Kings Canyon situation.

Adams: Yes, I did in a sense. I don't know how potent it was, but I called on at least thirty senators, and more than that number in Congress, and had a set of pictures, and got a very good response--except one. One man said, "Too many parks." I said, "I guess we can't talk to you." He said, "No, but I'm glad to see you. I'd like to take you to lunch if I didn't have a meeting. But we can't talk about this matter. There's too many parks." I forget who it was.

Teiser: Was there anybody in the Sierra Club opposed to the Kings Canyon?

Adams: Oh, nobody on the board. There probably was among the members. There are always members, for instance, who were for Mineral King. We were officially opposed to Mineral King, and yet we have thousands of members who want to ski in Southern California. They disagree violently.

Teiser: There was a protest against a road through the Sequoia National Park area?

Adams: That's the basic sound protest, that the road will do a great deal of damage. Originally it would cost \$26 million, but now it would cost nearly \$50 million, and it has now been turned down by the state senate. So the road won't be built. On the other hand, Disney said they'll put a cog railway in, which is all right with me. That'll just go up the foothills in a beeline and won't do any real damage. I can't say that I'm against the ski thing. I don't

Adams: think many people are against the actual ski development, and even Disney had the idea that they'd park way down the canyon and come in on buses. Now, the danger of the ski situation is that it does cut trees and it takes people to the top of the ridge, and that means probably some development on the other side of the ridge and on the wilderness area.

My main objection is the "coyness" of the projected village, which is a sort of pseudo-Zermatt. But I think that if they can't have the road, and people come in on a cog railway, crowds will be cut down to a reasonable number. And knowing the paucity of ski areas in the south, I just have to believe that it would be fair to give people a good place to ski if it can be accomplished without doing any damage. This road must go across ten miles of Sequoia Park. Mineral King was not put in Sequoia Park because of the existing mineral rights. Mineral rights cost money, and I don't think anybody's ever done mining there to any extent. I forget the dates, but Mount Ritter and Banner Peak and Thousand Island Lake and Garnet Lake and Shadow Lake Canyon and the Minarets--easily some of the most beautiful parts of the Sierra--originally were in Yosemite Park. The mining people had a lobby and thought there was a lot of juicy minerals there, but Mr. Colby had proven by careful study and exploration that the veins were shattered and that it was uneconomical.

They wouldn't listen to him. They influenced Congress to make a trade (this shows you that a park is a vulnerable thing) of so many acres--thousands of acres--for sugar pine forests in the northern part of Yosemite. So that beautiful part of the Sierra is now out of the park. They went in there and they spent hundreds of thousands of dollars in mines. It's just as Colby said, the veins are shattered--they've faulted. So you get a lot of nice juicy ore for fifteen feet and suddenly you come up against a blank wall, literally. And where is the vein? So the mines just petered out. And the Forest Service won't put it back in the park, and some people think it's better where it is. It has practically no timber value at all. And Devil's Postpile National Monument is adjacent to it. So it's a strange situation. It is park status, but I don't see it's been hurt at all by not being in the park. There's some relics of some mines there which have now become historic.

Trans-Sierra Highways, Continued

Teiser: There were suggestions of a road into the Kings Canyon--

Adams: That was very bad. This brings up a whole point that is terribly important. Many years ago, say in the middle thirties, we recognized there was a pressure for a road across the Sierra. And the chambers

Adams: of commerce have been working for what they call the Porterville-Lone Pine road, and that would go through Golden Trout Creek and really penetrate some wonderful wilderness area. And the Sierra Club vigorously opposed this. There was another road up the Kings Canyon (we have a road into Kings Canyon proper), but this was to go up Paradise Valley and over Independence Pass. We opposed that. The opposition was balanced by the fact that we approved of a big road over what is called Minaret summit--from Huntington Lake and that country over the Sierra--and if that road were put through, we would support it with the provision that the Lone Pine-Porterville and other trans-Sierra roads would not be built. The Highway Division agreed to that. They couldn't be legally bound, but they said this makes sense; it gives a basis for negotiation, "and we can assure you that the present administration will not press for these other roads."

Well, that has been the policy of the club for years. The war came and no roads were built. Then the pressure started again. Then the new group of people (I call them the "activists") opposed that road and said, "There should be no trans-Sierra road." Well, with a million people coming to the southern San Joaquin Valley it would be awfully hard, realistically, to say you can't have a road across the Sierra. I asked Wayburn one time, "I wonder what in the world has got into us? I mean, here's a chance to build a road which would go through the least interesting part of the mountain." [Wayburn answered,] "It bisects the John Muir Trail." I said, "What do you mean? You put a tunnel under the road or an overpass. It's uninteresting country." He said, "Oh, it'll open up the north and the south." And I said, "No, it can be built as a parkway without access," which is the truth. But they're adamant, you see. On some-- what do you call it?--tautologic point?

The result is now that they're starting up activity again for a road across the southern Sierra. The governor goes down and he says, "We'll never build a road over Minaret summit." Well, he's an absolute idiot because there's going to be a trans-Sierra road, and that's the only logical place, where it would do the least damage.

I know Mr. Colby was very strong on that. I have a great admiration for Colby's strong feeling about it. But, realistically, we have to have a road, and that's the place to put it. If we'd have had that road, we wouldn't have the present development of the Tioga Road. There'd be no need for it at all. I just keep trying to be realistic, and I'm accused all the time of being a traitor and destroying conservation ideals. But, believe me, a road across Minaret summit would do no damage of any consequence compared to one further south, or even what the Tioga has done. Just look at the east side of the Leevining Canyon. It is just a great excavation!

Teiser: I've seen your photographs recently of that.

Adams: And then they build the new road by Tenaya Lake; they cut right through a granite slope. Those are terrible things.

Teiser: The Sierra Club has apparently been working on that one for years and years to try to--

Adams: We tried to control it, and at the last minute they weasled. I was very anxious that the road never go to Tenaya Lake--it should bypass the lake, go up the canyon, come over Polly Dome and follow up Cathedral Creek and then to Tuolumne Meadows. And they weasled out on it. I got so mad; I came home and I sent a telegram resigning from the board of the Sierra Club. Then I sent four hot telegrams to Washington, duplicates to the director, to the secretary, to the Bureau of Public Roads, and the director of the Corps of Engineers. Before I sent them I called up Dick Leonard, fortunately, at eleven o'clock at night and said, "I want to send this telegram." I read it to him. I had accused them of acts of criminal negligence in this destruction. Dick said, "Put in 'approaching'. Don't get yourself out on a limb." So I changed it. Boy, within two days there were fifteen people from Washington in Yosemite. The superintendent was talking about seeing his lawyer; he's accused of "criminal negligence." And that word "approaching" is what saved it because it really approached ruining this country. And I had plenty of people that would stand back of it.

Well, it didn't do any good. Things had gone too far. But the club refused my resignation cold and sent it back by messenger. But anyway, I kept myself ethical, you see, in the sense that I was opposing the club, and being a director I couldn't do that. I had to say, "All right, I'm through; this is my opinion."

Teiser: Had the club gone along with the route, you mean, or was it opposing it too?

Adams: No, it opposed it, but it shilly-shallied and it got weak-kneed and it got "tired." You know, many of these very important issues came up toward the end of the day and everybody's tired and they don't use proper judgment. That's the time when you really should step in and say, "We'll have the meeting tomorrow and continue it on Sunday." But when they wouldn't do that, and somebody came up with a half-hearted idea, "We're invading wilderness if we take an alternative route"--Here's the most beautiful part of the whole Yosemite Park, this granite sculpture, which is unique in Yosemite, and they could have bypassed it, but they didn't. They went right through what they call the roches moutonnées, rounded ridges of granite. And in order to keep the grade, they dynamited a lot, and one ranger said, "Well, we moved all these glacial boulders around. Nobody knows that!"
[Laughter]

Adams: This is a high-speed road, which it wasn't supposed to be. But if you're going sixty miles an hour you have to see far enough ahead. So you have to grade the road accordingly. You could easily get into a catastrophic accident. If it were a 35-mile-an-hour road, it would not be necessary. Incidentally, it's supposed to be a 35-mile-an-hour road!

Teiser: The Pfeiffer redwood grove--Pfeiffer-Big Sur State Park--

Adams: Well, that was Colby's big thing, the Big Sur. They finally made a deal, a pretty sharp deal. But with the state park bond issue the money was available if it was matched, like with Point Lobos.

In the Big Sur park, which Colby almost single-handedly accomplished, the Pfeiffers owned a lot of land, and they put a very high price on it. This was not entirely an eminent-domain situation. This was simply that the state would pay half the matching money. We have a little deal now with the Friends of Photography where we have \$2500 promised if we can get \$2500 more. It's a pretty sound way to go about it. It certainly cuts out boondoggling, and it puts things on a realistic basis. So that's all I know about the Pfeiffer redwoods. Mr. Pfeiffer just figured out how many board feet he had and what it was worth. You have so many acres for farming or development, or so many board feet in your trees, and you expect to be paid for it. If it's eminent domain, the judge will make a fair appraisal--but if it's just a private sale, one could say, "Sure, you can have this house for a million dollars." It's not worth a million dollars, but if somebody says, "All right, I'm from Texas and I want it," it's my privilege to set my price. I think that's what happened with a lot of the state park areas. It was a matter of discussion, figuring out what somebody would take for a piece of land. That's all there was to it.

Teiser: We're coming close to the end of this tape. Do you want to--

Adams: No, go ahead.

The National Geographic and the Sierra Club Bulletin

Teiser: I'll ask you a short question. Another person who came to a Sierra Club even was Gilbert H. Grosvenor, the head of the National Geographic Society. He turned out for the dedication of the plaque to Mather. Was he a friend of the Sierra Club?

Adams: Well, he wasn't any friend of mine. He was a pompous ass. So is the National Geographic [Laughter] I hope if this is going to be published, we won't be sued for libel. [Laughter] He was a peculiar figure. In a sense he exploited nature and conservation. The whole National Geographic setup is to me a very questionable and very uncertain situation, and he is the head of this very successful business, which it really is. How it ever got by the IRS I don't know, because it's probably one of the most successful financial enterprises of its kind. And I'd be darned if I know exactly what they do. They built a \$17 million building; I have seen it. They have many expeditions. They pay for obvious things and advertise all over the place--in rather bad taste. I have a total disregard for that whole outfit, and I'd like to go on record as saying that.

When he came out to dedicate a plaque, I suppose he was invited as a significant person in the conservation world, of which we had many that I don't think really justify that designation. Does that answer the question? [Laughing]

Teiser: Very nicely. Absolutely.

Harroun: I think the National Geographic is the worst excuse for--

Adams: Well, the thing that bothered me was the ostentation, if you want to use the term. When I was East several years ago, I was taken to see the new building, and my gosh, the executive officers in the top floor, the president's office, was like what I'd read about Mussolini's office. I mean, the most elaborate--and secretaries, the most svelte. The whole thing looked like an IBM executive office. They claim it's nonprofit, but boy, they must have had very good salaries. Which is all right. I mean, the Sierra Club deserves to pay better salaries to the director and staff than we can. We're up to the \$40,000-\$45,000 bracket now, for the executive director. Their magazine must have fantastic production costs; but the advertisements must pay well. I'm glad to say that the Sierra Club Bulletin has finally awakened and is taking in advertising of the proper kind which helps pay for many of the costs.

Teiser: It did in the 1920s. It had some ads.

Adams: Yes, it had very nice little advertisements, and that's all due to Francis Farquhar and Dr. Badè.* They were really the ones that did an enormous amount of good in editing and producing that bulletin. And it was a very fine one, the best of any organization, and I wish, in a sense, they could go back to it. The one now is kind of flashy, promotional, and full of color, but that early Sierra Club Bulletin contained very fine literary material.

[End Tape 25, Side 2]

Sierra Club Outings

[Interview XXII (Sierra Club Interview III) -- 12 August 1972]
[Begin Tape 26, Side 1]

Teiser: Have you had any thoughts about what things you think should be discussed, or have you been too busy to think about it?

Adams: Oh, I think you were doing beautifully, giving me your questions and letting me expand on them. Do you have more questions?

Teiser: [Laughs] Yes, I do.

Adams: I think that's the best way. I think that trying to go back and reconstitute things in any sequence would be very difficult. Your questioning brings things out clearly.

Teiser: Last night at dinner somebody brought up Mount Ansel Adams. I think that should be on the record.

Adams: Oh well, that came about when I was one of the leaders of the Sierra Club outings. I got the group into the Lyell Fork of the Merced country, which is very remote and quite beautiful. We had an amusing experience. A sign fell down at the junction of the McClure Lake and Isberg Pass trail, and some do-gooder put it up, but on the other side of the trail so the arrow was pointing down instead of to the left. So while most of the people got up to the Florence Plateau, which is a big flatland above Lake Washburn, pack animals and everybody riding went on down to Merced Lake. They found out what the error was. Everybody arrived after eight o'clock at night, very tired and no food. It was quite an experience.

Well, then we went on from this plateau, which gives a marvelous view of the Merced group, as well as two thousand feet down on Lake Washburn. And then the next day we had quite a rough time getting over the old Isberg Trail to the Lyell Fork canyon, and then going a mile across country upstream to the big meadows,

*William F. Badè.

- Adams: where we camped and then made ascents of Mount Lyell from the south and Rodgers Peak. Everybody just loved it. They climbed a little crag that leads out from Electra Peak and put a receptacle on it and called it Mount Adams. [Laughter] It can't be called that as long as I'm around--you can't name peaks after living people. The receptacle may still be there. I had nothing to do with it personally!
- Teiser: How high is it?
- Adams: Oh, it isn't very high. It's more a spectacular crag. It's really part of a ridge. It's only important when you look up at it. It's quite a shape--looks like a battleship. When you get up high on Foerster Peak you look down upon it. It'd be like the Washington Column in Yosemite seen from North Dome.
- Teiser: In general, when you participated in leading those outings, what were your duties?
- Adams: I was in charge of the mountaineering schedules and leaders. If they wanted to go on a trip, they would discuss it with me. We'd outline trips and appoint leaders. I had to pick out the main camps. I'd get there early and pick out men's, women's, and married camps, and the commissary, campfire, and latrine, and stock control areas. Meantime, I'd try to photograph. I had charge of the campfires and the lost and found. So sometimes it was a pretty hectic business. Francis Tappaan, who was Judge Tappaan's son, actually managed the outing. And of course that's quite a responsibility, with two hundred people, all the food problems and running the packers and the basic schedules. So we worked pretty well together.
- Teiser: Were you involved in them for many years?
- Adams: Oh, I don't know. Let's see: 1927--I went to Canada in '28. Missed 1929. Then 1930 through '36, I guess.
- Teiser: Were you paid?
- Adams: I was given the trip and got a small fee and made photographs, and then a lot of people bought photographs, which I made for about cost. So it was hardly profitable! But it was a way of getting a good trip. I got--I forget--\$200, I think, for expenses.
- Teiser: Are the groups they take on outings now smaller than they were then?
- Adams: Yes, I think there's one big outing, but I don't think we ever have any as large as before. And I think that the normal outings now have a paid staff, and the small outings are all volunteer--or somebody who leads may get something. Because there's a lot of detail. It's like running a photography workshop!

Teiser: How did you keep track of people? How did you know when somebody wasn't lost?

Adams: We'd look at the bags at night in the bag dumping area, and if there were a couple of bags there that hadn't been picked up, we'd make an inquiry, "Is So-and-so here?" Sometimes they were; we said, "You hadn't picked up your bags; we didn't know." Sometimes people got sick on the way and we had to send somebody back for them. The difficulty was during the stay-overs, when we were in camp. The people would go out climbing and they'd get lost, and there'd be no way to know, except if somebody said, "I haven't seen Joe lately. Have you?" I would say, "No."

"Well, he went up Milestone today with a friend." Ay, yai, yai, it's dark and no Joe! Well, if he told somebody where he went, we'd know what to do and set out. If it were a moonlight night and we had a trail, we'd send out a party immediately. If not, we'd just wait until morning. They were instructed to sit tight. You could kill yourself going out on those rocks at night. It's one of the basic rules of mountaineering: you don't climb at night. You don't do anything when you can't see. Of course, a good trail and a moonlight night, that's something different.

And we had some accidents and deaths--there were some falls and drownings and some serious illness. We didn't have any helicopters or radio or anything. It was a matter of strapping them on a mule and getting them out.

Teiser: Did you usually have a doctor with you?

Adams: There was always an intern or an advanced medical student who'd take care of the minor things. Then we always had doctors on the party. In case of a real emergency, these doctors would help.

There was one case, one man who refused to do anything. He said, "It's my vacation." And I said to the doctor, "I think this man's got something very wrong in his tummy and I think you'd better check." Well, it finally got so serious that the doctor decided this guest had to go out, and the guest didn't want to go out to civilization. But with real effort we got him out on a mule. He barely made it.

Then we had another case of a man who had, oh, he had a terrible cold, and he was very sick, and the camp doctor said, "I'm worried about him. I don't like his lung sounds." I think it was Dr. [Walter] Alvarez, and somebody else who agreed. They looked at him and said, "We've got to get him out right away--it looks like double pneumonia. And at this altitude, eleven thousand feet, it can be fatal. He'll be dead in a matter of a few hours. We're

Adams: lucky if we can get him to a low enough altitude soon." Well, he did not want to go down. It would ruin his vacation. He'd been looking forward to it for years, and he refused to go. We had a tough legal problem, because how can you force anybody to do something against his will? It becomes abduction or kidnapping. So the doctor said, "We'll stand back of you. If he doesn't go out, he's going to be dead." So they went over and they "talked turkey" to him. They picked him up and put him on a mule, and he was very, very mad and threatened suit. We got him to Fresno, and he just pulled through. Later he wrote the most apologetic, thankful letter. He didn't realize what he had. When your lungs start to fill up at high altitude, and low oxygen, it's bad. I suppose if you had a hospital there, with intensive care and all that stuff, it would be okay. But out in a sleeping bag on a frosty night at eleven thousand feet with pneumonia!

Well, we had all kinds of things happen, funny things too.

Teiser: I have a feeling that, on the social side, there were more marriages made on the Sierra Club outings than in heaven. Is that right?

Adams: I think there were quite a few, out of the marriageable group. There was always a young group, and then there was a middle-aged, rather conservative group, and then there was a fairly old group of superior people. They may have been too old to be going on those trips, but they'd been doing them for years, and when they got really too old to hike, they'd ride. We had our two hundred people--we had over a hundred animals--mules and saddle animals and guide and pack animals. They really did a lot of damage to the country. Chewed up the meadows almost as bad as John Muir's sheep. Later when we took animals in, we had to pack in grain. Now we pack in gas heat. (We can't burn wood any more.)

Then there were great controversies--factions who said outings didn't hurt the country, and other people who said the outings did--back and forth, back and forth.

Teiser: Well, again, are you going to be easy on the country and keep everybody out of it?

Adams: Oh, I don't think it'll ever get to that stage. We have it managed now so the food is packed in and the garbage packed out. The animals don't stay. We leave caches. If they do stay, they have grain. And we're thinking of--I think it's already been done--packing in with a helicopter. And of course a lot of romantically minded people think that's terrible, but it really isn't, it's the easiest thing on the country. You come in with a load of supplies, and there you are. You don't have any problems.

Adams: Now, the riding horses do make a problem, and then there's the pack animals for the sleeping bags. But we used to work a kind of complicated logistics where they'd come in and we'd be in a camp two days, and they'd go out--say to Bishop--and return with meat and fresh vegetables. And then they would pack a portion on ahead to a cache. Then they'd come back and get the people's bags. Depending on the size of the mule, there'd be five or six bags per animal. Well, say six bags, the maximum weight was thirty-five pounds; that would be two hundred pounds per animal. So you take sixty people, there's ten animals; 120 people, there's twenty animals, in strings of five, and there'd be a packer for each string. So there'd be twenty-four animals. And then there'd be, I think, two strings for the commissary--all the equipment and the pots and pans, and commissary people's bags and stuff. And many strings were needed for food. Really complicated. Sometimes we'd sit there and wonder how in the world we were going to get this food in and move it ahead, and we might have to change schedules or hold people over for a day.

I remember one day we had a forced march for three days, long walks, and there were many very tired people.

Teiser: How far over an average mountain trail would a day's trip be?

Adams: Oh, I suppose our walks would be about twelve miles. You might have some that would be eight, some fifteen. Usually the first one was a toughy, getting out of some low elevation, like getting out of Yosemite up to Hardin Lake or getting out of the floor of Kings Canyon to Granite Pass. Let's see, from Sequoia we'd go to Summit Meadow--a long way. It wasn't so much of a climb; it was over minor passes but many miles.

Probably one of the toughest was the Granite Basin. That was a six-thousand-foot climb out of the Kings Canyon. We had to go three or four miles on the floor of the Kings to the base of the trail, and then we had to go up six thousand feet and over the top for a couple of miles to the plateau where the camp site was. That was eleven thousand feet high. Sometimes in the beginning the people would have very serious trouble with altitude. They'd be coming in at all times of night. I don't think it was very good for them if they had any heart trouble.

One lady had serious heart trouble at Sphinx Pass, and they got her down to the Ralph Merritt Ranch on Roaring River and thought she'd be there two or three days. She was there six weeks! The doctor wouldn't dare move her, and finally said, "She's as good as she's ever going to be. I guess if we go very slowly we can get her over the pass." (It was about a 2500-foot climb.) She didn't make it. We got up to 2500 feet and she expired with total heart

Adams: failure. This was a case of not being able to properly treat anybody. The doctor knew what she had, but what could he do? She had total rest but could not take that change in altitude. Once in a while things do happen, but I don't think we had any more than the average sad events.

Teiser: You were telling the other day about trips with the LeConte family. They'd whip everything out and have a big lunch. On these club outings, did people just carry their own small lunches?

Adams: There was a lunch line set up, usually after dinner (they liked to get the food out the night before), and sometimes after breakfast, if it was a short walk. That would be hardtack and, as Cedric Wright used to say, "a dried fig with a bug in it" [laughter], chocolate, deviled ham, dates, cheese, and rye crisp. Then, if we were going over a pass, we'd have little cans of marmalade. We'd have one can for every two or three people, so they'd have to gang together and mix it up with snow which, by the way, is very bad to do. To eat snow at a high altitude is one of the worst things you can do. It depletes energy terrifically--like drinking too much cold water. I've seen people pass right out cold. They're right at the edge of the fatigue limit anyway, and then they take this snow. It's a caloric problem.

So the lunches would be then put in a canvas cloth or plastic bag, and bits and pieces would gradually accumulate. It wasn't the kind that had organic dissolution; it just dried. And the hardtack would be just like slabs of bark. And there were raisins and chocolates. You always had all you wanted if you could chew it. People would stop and have little lunch fires--mostly for tea. Some people would arrange to have a tea party at four o'clock or thereabouts, near a creek. Somebody would smuggle in some cookies. We didn't care what you took in, providing it didn't exceed the weight. Mr. Colby always carried a couple of bottles of Cointreau and cookies in his knapsack. [Laughter]

I'll never forget: One man came up Piute Creek from Bishop, and he said that the thing that he really liked was beer. He didn't have much to carry in his knapsack, and he was going to bring in a case of beer and carry it himself. It was a terribly hot day and going up this very steep gorge for thousands of feet was very tiring, and this poor guy had that knapsack full of beer. Finally I said, "Look, you'd better let me help you with that." I had the heavy camera, and he said, "Nope, you can't carry any more than you've got; it's up to me. I'll be in even before midnight." And he said, "Why don't we have one now?" And I said, "That would finish it." [Laughter] He had enough beer; I think it was two cases. Almost a bottle of beer a night for the two weeks he was on the trip. [Laughter] People would put out their tin cups and he'd give them about an inch. [Laughter] It was usually rather warm and insipid--terrible.

Adams: There were some people that smoked heavily and, of course, paid for it. They were smokers down below, but in the high altitudes, it's just dynamite! We had many people faint. Mountain sickness is a very peculiar thing. Primarily it's a kind of faint--there's not enough blood to the brain and you just pass out for a little while. Then there are all kinds of secondary sickness. I don't understand it medically, but it upsets your stomach, creates a depression--oh, you can be awfully sick--headaches, etc.

Teiser: That goes away usually?

Adams: It generally goes away fairly fast. People come out from the East and they have no idea at all what they're getting into. They think about the Berkshires or something, and then they find that they've got a four-thousand-foot or more climb the first day. Getting out of Yosemite is about four-thousand-foot, no matter which way you go. If you got up to Glacier Point, it would be thirty-two hundred, but you wouldn't camp there, you'd have to go higher up. The same with Yosemite Creek.

Teiser: You were on the outing committee--

Adams: Yes.

Teiser: --until 1937, I saw, whereupon you and Mr. Colby and Francis Tappaan all quit.

Adams: Well, we felt we'd had enough, and young people should take it on. It's really a young man's job because it's extremely arduous. Even then, we began to worry about the future of the club, because there were all these old characters staying on and on and on. There wasn't any new blood, so to speak.

Teiser: Well, you were at that time at the advanced age of thirty-four. Did you consider yourself an old character?

Adams: Oh, I'd been around. [Laughter] No, I tell you, what happened was, I had so much professional work to do and I had to go east, and this club work was just too much. Trying to photograph, and to do the outing was almost too much.

More Sierra Club People

Adams: Cedric Wright took it on; he took the photography job and the sanitary situations. He did a fine job for many years, but that was much less arduous than mine. He'd just have to pick out the

Adams: site and see that the "burlap" was taken down and packed up in the morning. He manufactured these very ingenious collapsible latrines. They were terribly funny. He had a great sense of humor. Ray Strong painted dinosaurs on them. It's euphemistically called a "burlap." It was quite a trick getting it all set up. There were at least two of them. When you get into rocky moraine country, it's quite an excavation problem. But Cedric would be up at four o'clock, and fuss around the commissary and get his cameras all ready, maybe made some early pictures, and then when the people left, he'd dismantle these things and see they were properly packed. And then he'd rush ahead and photograph all day on the trail and scoot into camp and get them set up again. Now, there's all kinds of different devices. I think they're simpler, but I don't know.

Teiser: Was he sturdy physically?

Adams: Oh yes. He was always in fine condition. He had an obsession with chocolate. I think he lived on chocolate, and that was very bad for cholesterol. He had a lot of family troubles, and he had mounting blood pressure. And he had some kind of fool doctor who never did anything about it, and it used to worry his friends. Cedric would show the effects of it--"Oh yes, 220 over 110." "Cedric, you know, you've got to do something." A doctor friend told me, "This man's going to kill himself. It's serious." And finally it got up to 300, and then he had a stroke and never really recovered. It was very sad, and it shows what can happen when you get out of sync with the things you need most. You don't monkey with high blood pressure. Of course, you may not know what you've got, but you usually know something's wrong, and a good doctor will quickly find it out. I have what they call labile blood pressure. All of a sudden it will hit me. I feel perfectly fine for a long time, and then I begin to feel funny. I can take my own blood pressure, and if it's up, I have a little pill which brings it down. I haven't had it now for several months, but it could come right here, talking to you. I first begin to feel a little strange--not really dizzy. I take a little tablet, and in ten minutes I'm all right.

But if I kept working against that pressure, it would go up and up and up. That isn't good. And it seems that people who have done a lot of strenuous work, like climbing around mountains and so on, are inclined to it. Because for some reason, I suppose the heart gets enlarged from the extra-heavy work, and then when you ease off you've got a lot of heart muscle that isn't quite needed, and it apparently sets up funny rhythms and causes these effects. I'm not worried at all about it, because I know what it is. But poor Cedric had a terrible persistent set-to with it, and it finally put him a little bit off his rocker; he became very

Adams: erratic. He spent the last several years of his life writing a tirade on education. He apparently hadn't had good luck as a child in school, and he was trying to reestablish his wrath--and wrote hundreds of pages of mimeographed stuff--an absolutely hysterical tirade.

But that's what happens so often with gifted people. He was extremely gifted, and he was a marvelous teacher--violin. And he was an extremely smart and shrewd person, but he prided himself on being unscientific. Something like Edward Weston. He and Charis [Wilson Weston] would berate science. And I'd say, "You're using a sensitive film, and that's pretty much of a technical triumph. And that lens you've got--that isn't made with a flint knife, you know, or a hoe." Well, that kind of science I guess was all right. It was very strange.

I got the funniest letter about this Datsun ad [a television commercial in which Ansel Adams participated; a tree was to be planted for every Datsun test-driven] from a man who agreed with my philosophy of photography. He didn't see anything wrong with planting a tree, but the fundamental dichotomy was to drive a car and plant a tree. Now, those were two opposites of ecology, and it simply did not make sense. "But of course," he said, "I drive a car." I didn't know what he was trying to get at in the letter. I'm going to ask Bill Turnage to answer it, because I don't understand this person. His conscience is eating him in some way.

Teiser: Ask him how many cylinders there are on his car. I don't believe there's any car that has fewer cylinders than a Datsun. You can't have three--

Adams: You can. The old D.K.W. had three, but it really acted as six at high speeds. It was a two-stroke engine. I had a couple of those. It was a wonderful automobile. It was two-stroke. When it idled it sounded like a cocktail shaker, but when it was running, and you got to any speed at all it would buzz along, like a watch. The engine had only seven moving parts.

Teiser: When did that come out?

Adams: That was ten, twelve years ago. Called D.K.W.--made by the Auto Union. And then the Volvo, I think, had a three-cylinder. And they're very efficient, but they do pollute, because the oil is mixed in with the gas. They're extremely high rpm--9000, 10,000 cycles per minute. So when you're going along a highway at fifty or sixty, you purr. It was a very well made car.

Teiser: Going on to some of the other people. Aldo Leopold--

- Adams: He was the father of [A. Starker] Leopold who is a professor at the Museum of Vertebrate Zoology. And he has another brother.
- Teiser: Was the elder Leopold a member of the Sierra Club?
- Adams: Oh, I think so, but I think it was pretty much before my time. I don't remember him. I might have met him. I remember Vernon Bailey.
- Teiser: Vernon Bailey?
- Adams: He was a naturalist. I don't really know where he came from. He was an important man in his field. He tried to dissuade people from being afraid of snakes. He would show how a rattlesnake can't stand direct sun. He had a big clearing in Pate Valley, and he put the snake in it and kept it in the sun. It just curled over and died. It's a cold-blooded animal--they can't stand the heat. They live in the shade and under rocks, etc. Bailey gave very interesting talks, at an entertaining level, at our campfires.

Sierra Club Campaigns

- Teiser: I made a list of things that the Sierra Club was either for or against that are recorded in the Bulletins and the 1971 Sierra Club Handbook. Admiralty Island, off Alaska. Do you remember that campaign?
- Adams: Oh, I remember something about that. I don't know whether that was a wildlife situation or a scenic one. I don't know. But I know we had some discussion on it.
- Teiser: And the expansion of Death Valley. This was in the early thirties.
- Adams: Yes, that was very important. As I remember there, we tried to get the mining privileges out, and we couldn't do that because the congressional act which set up the monuments specifies that mining rights would be protected. But we did get the expansion in, and the reason I think was largely a matter of desert flora and fauna and a general rounding out of the area.

You see, you'd always have to remember that there'd be certain groups in the club who'd get a bee in their bonnet about doing certain things. It's a good idea, but it, for them, became absolutely total importance; nothing else mattered. Like saving the tule elk, which has been a big campaign lately. You'd think it was really saving Holland! It's one of the most really complete

Adams: campaigns. (They've saved them--they've got a state bill now that assures a preserve, and I think they're all right.) But there'd be all kinds of small groups who'd go after specific projects. Sometimes the things weren't really worthy of national attention. And that would cause hard feelings because the main club office would say, "We just can't! We have so many things to do. That's a local problem." But, boy, some people have got an unbounded energy for discourse. [Laughter]

We just have a situation now about reprinting a mountaineering book, and this man is challenging the first ascent records. Again, you'd think it was a major constitutional decision of the Supreme Court. I mean, there's been reams of paper written about it and mimeographed and circulated--ten, fifteen, twenty people involved. And I got this stuff from Tom Jukes, and I sent it back because it was incomprehensible. Jukes suggested we take all the registers off all the mountains, then ask everybody to go up and make a first ascent, because there's no previous record. And this man would say, "I made the first ascent of Crag 12,850, which is the third crag south of the North Palisade, and I made that ascent in 1917, and that's the first ascent. Somebody in your book says he made the first ascent in 1920 and that is wrong. I demand that that be corrected." You know, that kind of monkey business, and what difference does it make? It wasn't climbing Mount Everest. I always say, all arguments like that are making a Montaigne out of a Molière. [Laughter] (That's terrible.)

Teiser: I have next Olympic National Park. It was proposed in the thirties, and it wasn't until the fifties, I guess, that it was pretty well completed.

Adams: Yes, we had a lot of trouble with the timber people there. You see, lumber is the prime industry of the Northwest. They allowed the Mount Rainier area to come in. There wasn't much forest. But the Olympic took in quite a lot of timber. We wanted it to go all the way to the ocean, and the timber interests objected. So it became very "legal," with lots of lobbying and congressional contacts. It was pretty complex. That's where people like Colby were superb, because they had all the legal knowledge of the means of acquiring it. It's not easy. You are asked, "What's the status of a certain area?" And you've got to do a ton of research before you can reply. You can rest assured the other side's done it too, and is using that part which is favorable to them.

Teiser: In the creation of national parks, in general, would the National Park Service be with the conservationists, or did they try to stay out until it was--?

Adams: They were usually very good. But if they felt something was a hot potato, they'd be rather passive. Some of these things were political hot potatoes, and that's why the director of the Park Service has got a terrible job, because he can exist only by the sufferance of Capitol Hill. And when our friend George Hartzog goes up on the Hill and starts working for parks that invade timber industry areas, bang! all the timber senators and congressmen come right down on him and write letters to the secretary: "Let's get rid of this destructive character." You see, it's really very potent and very dangerous.

The Park Service may propose something and then sit back and wait for a response. And then organizations like the Sierra Club or the Wilderness Society and others will take it up. It never works the same, but that's more or less the way they propose a good idea, then see what the support is and act accordingly.

Teiser: What's the answer really? Is there any reasonable compromise on lumber?

Adams: Well, yes, what we're doing is setting up these wilderness areas and, of course, trying to get the Forest Service to save the prime forests. But after all, as I said before, the Forest Service's function is to control the flow of use, not to preserve nature for scenic reasons. I guess the only answer is just to allow certain areas to be recut and replanted. Now, there was great talk about this last night because of the controversy about clear cutting and selective cutting. I'm personally in favor of the clear cutting, because I think it's much cleaner, and while it does leave a scar, it depends where it's done. For instance, all the big mountains back of Santa Fe have been burned off in the fire of, I think, 1923, and now great groves of aspens have grown up. And now I can see conifer trees growing up among the aspens. In time the forest will reassert itself. That had never been replanted. It's not true to say it takes thirty years for a forest to grow. I've photographed them--perfectly beautiful stands of young trees that are fifteen, twenty, ten years old. For instance, this tree [outside the window] was just up to the floor ten years ago. A Monterey pine is one of the fastest growing trees.

Teiser: How tall is it now?

Adams: Oh, it goes up to about thirty feet, I guess.

So if they do clear cut and then immediately plant, and if they can in some way avoid clear cutting to straight edges, then you wouldn't have this checkerboard feeling. But the surveyors go in and draw lines. Now, if they could just make a ragged or random edge, it wouldn't be such an eyesore.

Adams: But the selective cutting--going into a forest, cutting down a good-looking tree, cutting off the slash and taking it out--does an awful lot of aesthetic damage. As long as you don't plant trees in rows, like I understand they do in Europe, you will approach a natural effect.

Teiser: We did it with eucalyptus.

Adams: Well, that was largely windbreak, and they found they couldn't continue it, because it took too much water out of the ground. There's very few left now; they're taking them down.

Teiser: Have you ever known any lumber men whom you thought had good ideas?

Adams: Oh yes, a lot of them. Most of them are very fine gentlemen. They've got their business to attend to. They're mostly very sincere. What they're trying to do is to get maximum yield. Their goal is 96 percent yield in forest products, and it's been 50 and 60 percent so far. Now it's going up to around 70--I forget what the last figure is. That's using chip and slash and bark and tailings--all the stuff that was formerly thrown away and burned up. They use a lot of it chemically. Well, if they can get it up to 90 percent it will be most favorable.

One of the big companies has about 180,000 acres--and they told me, "We have enough now to keep us going indefinitely. As soon as we cut, we plant, and when we get around there again, why, it's lumber; but sometimes it's used for pulp." I think it's absolutely ridiculous to say you can't cut trees. It's where you cut them. I think, as a rule, they've been fairly cooperative. Of course, the Redwood National Park matter was so vague that they got mad, and they went in and they cut ruthlessly. They were trying to prevent a larger park, that's all. While the squabble was going on to get a larger park, they were cutting down the timber that was hoped to be in the larger park.

Teiser: Which--

Adams: Redwood National Park. You see, as I said before, practically every other area we think of is either Bureau of Land Management, Bureau of Public Lands, or Forest Service land. The redwoods are on largely private land. So it's more than a matter of congressional shift of control. You [can] take it from the Forest Service and put it in the Park Service. When you come to private lands, then you have to buy them and, of course, the redwood is very expensive. A hundred thousand acres would cost something in the order of--I don't know--something like \$25 million, at least.

Adams: But you see what happens is, there are things we didn't figure on. The Rockefellers gave this big fund for the Bull Creek Flat. The Bull Creek Flat is one of the most beautiful redwood groves. And we thought, "Well, this is safe." Then the lumber companies work back in the watershed and clean out the spruce and the pine (there's little redwood up there), and create an erosion problem. Along comes the heavy rain storms, and the redwoods are severely inundated as they've never been in their history. We have lost some of the finest trees because the roots are fairly close to the surface, and when they have six or eight feet of water around them they become saturated, and the trees topple. Now, under natural conditions that never could happen. But the hillsides were cleaned off; then came the rain. With clear cutting, of course, you could have that situation in same places!

No matter what you do, it's--well, it has its effect!

Teiser: And if you don't do it, it has an effect. [Laughter]

In connection with Redwood National Park, there was some controversy between the Save-the-Redwoods League and the Sierra Club?

Adams: Yes, that's a long and unfortunate story. The Save-the-Redwoods League did, I think, an incredible job and conducted themselves very well, and all the people they worked with were friendly and realistic. The League would raise, say, \$100,000 to buy redwood land timber. And they'd bargain for a good rate, and they'd acquire it. I don't know of another way to do it. But the whole Sierra Club attitude was that all these lumber men were just total bastards and that they are fighting to prevent the parks. You see, there's always this negative attitude. Actually the lumber people are fighting to protect themselves; they don't want to prevent the park.

The first park plan, I think, had the approval of the Save-the-Redwoods League because it enlarged many of the areas the League had worked on. And quite a number of people thought that was fine. Then, as I said, there was Wayburn and a few others who decided it wasn't right, and we needed more, and that more caused a great delay and loss of some valuable areas. So now we have a park which is inferior to what it could have been.

Teiser: There was something about the Save-the-Redwoods League wanting to enlarge Jedediah Smith Park and the Sierra Club wanting instead to include some lands in Humboldt County.

Adams: I don't know the particulars of that. But the Save-the-Redwoods League had the big plan, and what they were trying to do was to get these nuclei established, these state parks, and then build around

Adams: them. You see, the Avenue of the Giants, composed of several memorial groves, was on a two-lane road, and the Save-the-Redwoods League, instead of buying a lot of land, bought the land along each side of the road as fast as they could. Somebody put up ten, fifteen thousand dollars and they'd buy a big strip, and it would become part of the avenue. Really quite a wonderful thing to do. But then private land began just a hundred yards or two hundred yards beyond the borders of the avenue. The lumber people cut down to the borders, so you can't go in any distance beyond the narrow strip of trees.

[End Tape 26, Side 1]

[Begin Tape 26, Side 2]

Adams: This was anticipated some day, but not so soon. That meant we did have a corridor with little depth.

Then the freeway people came along and said, "We're going to put our freeway through the Redwood Highway area," which would have practically removed all the trees, most of the important ones. This would have left a very narrow band of a few trees. And the club put up a terrible squawk on that. All power to Governor [Edmund G.] Brown. In some way, he finagled the funds to put the road on the other side of the river. I understand it was not really legal, but it was very important to do it. I mean, he just transferred funds and said, "Now, come and get me." It wasn't personal; it was for the good of the cause. I understand it was really quite a brave thing to do. They had to buy land, but they saved the Avenue of the Giants. You see, it's always these problems--give and take, win this and lose that.

Then the Save-the-Redwoods League had bought quite a lot in the area of Fern Canyon, and the lumber company gave Fern Canyon to the state. It is a very beautiful gorge--I guess about a half a mile long, with vertical walls covered with ferns. One of the most beautiful places. If you are a company and you have stockholders with money invested, you have to protect it; you just can't laugh it off. Eminent domain is always there, but it's expensive.

Now, another thing that's terribly important about the redwoods that a lot of people don't realize--the labor situation. You see, the general people were very much against the park because it cost jobs, lumbermen's jobs. The next thing that happened: the Park Service said, "Well, we'll employ more people in the end than the lumber industry would in this area." Yes, but they're different people. Lumberjacks aren't going to be rangers or concession operators, you see. They had a terrific opposition from the population, the taxpayers. That is still seething; I think people resent that very much.

- Adams: And on various occasions, masses of people in the area will protest a park because it does potentially cost jobs, and of course, their jobs. A job is not abstract as far as they're concerned.
- Teiser: Something of that sort came up in connection with Jackson Hole.
- Adams: Very much so, especially taxes.
- Teiser: What was the story there?
- Adams: Well, you see, the Rockefellers had this great preserve. They were paying taxes on it, and it was quite a considerable amount to Wyoming. The Teton National Park came right down to the base of the mountains and stopped. The people in that area wanted dude ranches and cattle running, you see--private property--to pay taxes. So Rockefeller then offered to give the whole area to the national park system providing it would become part of Grand Teton Park. Then there was a terrible roar. Well, it turned out that after Rockefeller gave the area, the taxes were double what they would have been, you see, from all the developments that came. The town of Jackson boomed, as did the settlement of Moose, and many of the private holdings, ranchers and concessioners. So the state of Wyoming has done extremely well, because that's a very popular park. So now they think it's wonderful!
- Teiser: It was a matter of taxes and not just of disgruntled people not wanting a lot of tourists coming in?
- Adams: Might have been some of that, but I think that was minor. I think it was primarily taxes.
- Teiser: I'll go back again to an earlier period of the club's campaigns. I don't know if you were involved at all with the one against the Yellowstone Lake dam.
- Adams: Yes, we were very active on that. I just voted against it [the dam], as I remember. I didn't get into the science of it at all. We won on that, I think, and they found another site. Now, when it came to the Echo Park dam, that was one of our most intelligent projects. Because here was this extremely beautiful place, and they wanted to dam it. And it was perfectly obvious that the district needed the water. Well, the most sensible element in the club said the only thing we could do was to provide an alternate. So we hired some very competent engineers. I forget who really did this--I think Walter Starr or somebody was active in it. And they found, after rather expensive surveys, that there was another site. And the only objection to that site was that it would have a higher rate of evaporation because it was bigger. But that the cost of the dam itself was much less. So with that ammunition we were able to save

Adams: Echo Park. A lot of people in the club take personal credit for these things when it's really a collective effort. And also support from the outside too that we sometimes don't acknowledge, and we should. It's silly that there should be competition between organizations working for the same thing. But that's happened quite a few times when some want to take all the glory--it's been a little depressing.

We are now, I guess, the biggest conservation organization, in a sense, but there's some other very potent organizations--the Wilderness Society, Nature Conservancy and Resources for the Future, and others. A lot of them are not flamboyant; they work behind the scenes, but they have a terrific pull in Congress, with all kinds of problems in the works--timber and wilderness, etc. We have our smoke-filled rooms just like the regular politicians! There is a lot of discussion and persuasion involved.

Teiser: When did the Echo Park controversy come up? What period was that?

Adams: I think that was shortly after the war, right around that time.*

Teiser: Was that part of the Dinosaur National park?

Adams: Yes, it's in Dinosaur National Monument--that's the area. Again, a monument has only a quasi-protection. It's not as secure as a park.

Protection and Overprotection

Teiser: Somewhere in the late thirties there was a threat to both national and state parks about oil and gas exploration--leasing or selling. Was that ever anything more than just a threat?

Adams: One thing is very important to realize: the National Parks Act is not in the constitution. It's only an act, an enabling act, which could be rescinded at any time. It's perfectly conceivable that we could have a Congress that could abandon the parks, turn them back to the Forest Service, turn them back to private ownership, put them up for sale. It's all a matter of congressional power. Of course, the people, I don't think, would stand for it, but it's theoretically conceivable. So while the regulations and rules prohibit certain things, those things can be approved by an act of Congress, approval of the President and so on. It's always a matter of sitting on pins and needles.

Teiser: There was a proposal to repeal the Antiquities Act--

*1950-1956.

- Adams: That's the national monuments. That's called the National Antiquities and Monuments Act, I think--the full name.
- Teiser: And if that were repealed, what would the status of the national monuments have been?
- Adams: Well, I suppose if they're forest, they would be cut. If they're open to mining or to tourists, they probably would go to the Forest Service and come under that administration.
- Teiser: Was that a real threat?
- Adams: Oh yes, it was a threat.
- Teiser: Who wanted to do it?
- Adams: Oh, I guess people of the Congressman [Wayne N.] Aspinall type--pretty much determined to reduce public ownership. He's from Colorado, and he has big mining interests back of him. It's not easy. It's a very complex thing.

The Alaska timber situation is simply ghastly. I mean, the Forest Service there is dangerous. I don't know what they're doing with that, whether they'd be able to control it. But they've let out 97 percent of the land all at once, a lot of it for cutting trees for pulp. It can absolutely ruin southeast Alaska. There's no really good land plan around. We have Mount McKinley National Park and Glacier Bay and Sitka National Monuments; these are historic. Some of these monuments are just little areas with an old building or a totem pole--relics, you know. Canyon de Chelly is a national monument, and that's primarily because of the great ruins. But it happens to be one of the most beautiful parts of America and it's really owned by the Navajos. So there we have a double protection.

Sunset Crater National Monument--there's nothing there but a lot of recent lava which, if its aluminum content is as it is in Hawaii, could very easily be enticing for strip mining. Although in Kauai they like the lava to become eroded into soil because it's cheaper to process. I think it's 18 percent aluminum.

I think it's just a great big game, and you have to watch every play of it.

- Teiser: Every now and again, someone wants to mine the town of Columbia in California--go under the buildings and dig up the streets to pick up the gold that's been left around.

Adams: Well, they go over and over again Sierra foothill land with the dredgers; they get some money out of it, and then they come along with a better process and do it all over again. I don't think there's enough gold in Columbia to permit that, but there are people who'd be perfectly willing to do it for twenty bucks a square mile, you know. It's really sad!

Teiser: The San Jacinto tramway, the one that was built finally, do you think that was such a bad thing?

Adams: No, I never could see anything wrong with that. The club opposed it, but I don't think more than half-heartedly because a lot of people down there wanted it as opening possible ski areas and recreation areas--very seriously needed. Now, I've been down there several times. I've only been able to see it once. It's an awful big mountain, and when the light is right, you might see the little cables. It's like Yosemite. There's a power line that goes up by Sentinel Rock, and that's where I want to see the [Yosemite] tramway go if it goes at all. You won't see it. It's much better than a road. There's been all kinds of trouble at San Jacinto State Park, concession trouble, and whether they wanted a restaurant or some kind of resort, or whether they wanted to keep it natural and primitive.

They have another cable tramway at Albuquerque, and you know that's all public lands, but very deserty. And you can see those cables in the morning when the sun hits them. But they go up the southwest side of the Sandias. Apparently they give a very spectacular ride. There's a nice restaurant at the top, and I don't think it does any harm at all.

You see, the whole thing about tramways is that people just have an idealistic opposition. But if you bring a tramway up the dull side of the mountain, and you bring people to the top, and then you have this wonderful wilderness view and you have nothing intruding in that, then the tramway is a great asset. For instance, you could have a tramway at Glacier Point, and people would emerge to a great view; it could be an enormous emotional experience. It would do very little, if any, harm.

Now, if you had one at Half Dome or one that comes up the face of Glacier Point, then you're doing a lot of harm. That would become serious intrusion. A lot of people have a perfectly blind opposition, without any definition of fact at all. That, to me, is very annoying, because we've done some terrible things that if they had been accomplished in another way would have been most rewarding.

Adams: Then, of course, in ten years time you're going to have all kinds of changes in transportation. I think the tramways are being improved. The helicopter, short-take-off-and-landing planes, can bring people to the edge of things and leave the wilderness inviolate. Or if you're going to have a pack trip into the mountains, you can take all the supplies for the entire trip in, with a helicopter. A half-an-hour flight in, and a half an hour unloading and half an hour out; you've saved the damage of thousands of mule days.

Then the other idea, of course, is just closing off the areas. There's people that want Yosemite to be completely closed at El Portal. You would have to walk in. To me, that is totally unrealistic and totally selfish.

Teiser: It's a long walk.

Adams: You see, there's always the groups that say the wilderness exists and everything should be open for all our citizens, because after all, we all own it. Well, they don't realize that that would ruin the wilderness if it is fully open. You'd automatically destroy it. Then there's the extreme opposite group which says only those who are capable of back-packing or arduous work should be able to go into the park. Politically, that's absolutely impossible, so it's just silly to talk about it. The only way you'd do it would be to establish a dictatorship and by imperial decree set it all aside as the emperor's garden, or something. [Laughter] You never could possibly manage it in a democracy, and I don't think you should try. I think people should have the privilege of seeing as much as they can and experiencing as much as they can, providing it doesn't do any harm.

Part of the wilderness devotee's idea is to leave things go. If a bridge falls, you never build another one; if a tree falls across a trail, you never take it out. Well, that effectively just bottles the areas up, closes it, and you might as well consider it as a specimen on a shelf.

I don't know what kind of emotional hysteria and paranoia they're solving by these attitudes, but they sure exist.

Teiser: What's the difference between a wilderness area and a primitive area?

Adams: Well, you've got me there. These definitions are so complex. Primitive area is where its occupation and use is primitive--perhaps like an old mining town. It might have a road in it, but there's no new development. There's no hotels. Nothing contemporary goes in. I mean, things are kept as they were.

Adams: Now, I think possibly Cades Cove in the Great Smokies--that might be called a primitive area, because people continue to farm and live as they did a century ago. Well, I think they'd have a television set somewhere. But there's no paved roads. The old log cabins are there, and the old way of life.

Mineral King, as it stands now, I would say would be a primitive area. There is a very difficult road going into it, and a few shacks, maybe a mine--I just don't know what its status is.

But a wilderness area is where you have no culture, as we call it, only the most essential things, like a trail or a bridge, or a fire station.

Teiser: The Gila Wilderness Area--it was established at Aldo Leopold's suggestion as a primitive area and then became a wilderness area in 1952.

Adams: Well, you see, there were people living there--the natives. And I think that was just a step to attain the objective, but not doing it too devastatingly quick. Then of course they want to put in dams there, on the Gila River! And you find people now who think Lake Powell is the most beautiful thing they ever saw. They go out in boats--go up all these gorges, which were formerly canyon cliffs, They never saw the canyon before; I never did. They think it's just marvelous filled with water. It's a matter of taste!

That Eliot Porter book, The Place No One Knew, is expressing an ideal. And it's fortunate, perhaps, that very few people knew it, because it couldn't have stood heavy traffic. Even the Grand Canyon will suffer from the traffic, but not as much as others. The beaches will get rather dirty and cluttered. A lot of people in there cause sanitation problems--but of course they have occasional floods that clear it up for a while. But the dams on the Colorado River are already really silting up.

We don't realize what's going to happen, say, to Boulder Dam. It's not very many years before it will be a great big mud plateau. I don't know how many freight trains of silt are coming in there every day. And of course the water below that now is absolutely pure--almost pure--because the silt is taken care of. So while the Colorado used to run muddy red into the Gulf of California, it now has very pure water, because it has a series of dams. And each one of those dams is acquiring the silt and silting up--getting shallower and shallower and finally it'll just be quicksand, and the water will pour over the face of the dam, and that's the end of that. Because the Colorado carries down a tremendous amount of erosion material. And the interesting thing about the Colorado River is that the river cut at about the same rate that the land rose. The river

Adams: has the same altitude that it had a million years ago. I don't know the exact figure, but the river still flows at about the same altitude as it always had!

I remember in that country you'll get a heavy rainstorm, and you'll see the mud running. In twenty years, say in Monument Valley and certain other areas, I can see the profound difference, and all that mud's gone somewhere. It goes into the streams. In the natural course of events, it would get into the Gulf of California.

Of course, you know what happened in the delta of the Nile-- boy, that's a controversy! Because the Aswan Dam has now stopped the water, and all the nutriment which came down to nourish the Nile delta doesn't come anymore. The farms are going and there's all kinds of agricultural problems, but there's plenty of power. But apparently it just upset the whole economy of the country.

Teiser: How was Glacier View Dam stopped? Was there any special thing?

Adams: I don't know. I think these things are just a matter of how much power is on the other side. You have to get the philosophy of the Corps of Engineers clear, which nobody seems to be able to do. The Army Engineers are kept going as an organization because in time of war they're terribly important; they set up the military earth works and all that. But they now have "civil" construction, huge projects. And it's often been proposed that they abandon this work and private contractors be brought in. The Army won't hear of that. But while we're in peace time, the Corps of Engineers has to be kept busy-- channeling rivers and building dams. They have to do something to keep the staff alive and knowledgeable. They love to get their hooks in any construction work they can. They're channeling rivers, like the Napa River and many others, which from a flood control principle is wonderful, but absolutely ruins it in the natural sense. And the flood control is because there's a lot of people around. There'd be no need for it if there weren't so many people.

In the Los Angeles area, in the San Fernando Valley, and in the San Joaquin Valley, you see these tremendous areas excavated for flood control dikes. In case of an extreme flood the river's kept in bound. Well, now they've got so many dams, the danger of a big flood is not so great. But say they have the sudden threat of a heavy storm at the Oroville Dam area; they have to store an awful lot of water. Well, then they hope they can move that into other storage areas. When the storm comes it may fill up the dams. If the dam's already full, it no longer controls the flood. The water goes over the top of the dam and may raise Cain below. So now they try to anticipate these things--lower the dam in advance so it will take it, and put the water somewhere else. It's quite an amazing business.

Teiser: The big fight over Dinosaur National Monument started in about 1950, I guess, and I think the Sierra Club put out a special issue of its Bulletin.

Adams: Oh yes, they had a big campaign on that. Wallace Stegner wrote a book on it. Yes, that was quite a campaign. I didn't realize it was that late.

Teiser: Did you take special part in it?

Adams: No, I just voted against the dam, put it that way.

Teiser: Were you in agreement with the Sierra Club's actions?

Adams: Yes, I think so, especially with the one of finding alternate sites and going about it in that intelligent way. Philip Hyde did some beautiful pictures of it.

Teiser: And that was a thoroughly effective campaign?

Adams: Very. Well, that was well organized. It was done with a lot of dignity, and there wasn't much ruffled feelings, and there was logical persuasion.

Citizens' Campaigns

Adams: I think it's like when we got rid of the Humble Oil plant, up here at Moss Landing, an example of laying the cards on the table. And the president of the company and Tom Hudson and myself--Bill Kramer and a few others--we're all on pretty much a first-name basis. We just told them that we didn't want them and it would be very dangerous for the farms in the Salinas Valley, which was about the only clear farming area remaining in the state. The refinery would invite big industry and it would be very bad for their image. They pulled up stakes and went to Benicia. Of course, what Benicia thinks of us is not polite [laughter], but they already had many refineries, and that's a more appropriate setting. But Tom was really wonderful because, with his own money, he would fly to Texas to see the president and sit down and have a couple of drinks with him, or go out to dinner and talk. And he would say, "You know, we're talking about real values--scenic value, cultural value, and now you people come along, and you start a trend which will completely ruin these values, and it will not be good for your image. You don't want to do that, do you?" It worked.

Adams: The same with the PG&E, when they put in that huge plant at Moss Landing. This just shows you how crazy it can all be sometimes. They started up the plant and, my gosh, there's a plume--pollution! And the citizens of Monterey, they walked down Alvarado [Street] protesting. They got everybody up in arms. PG&E put a big ad in the paper saying that this was as much a mystery to them as it was to anybody else: this was the largest plant of its kind in the world, or one of the largest, and no matter what it costs, we're going to stop the pollution, you can be rest assured of that. But they hadn't found out what was causing it. A chemist from Santa Cruz wrote a brilliant technical, scholarly-sounding paper for the Monterey Herald, in which he decried the use of sulphur-bearing oils--have no need for it in these days. And PG&E was really criticized for this use of primitive fuel. But they weren't burning oil; it's all natural gas! There wasn't any oil in the place. They have a stand-by tank; in case the gas line breaks, they have enough oil to put in for a day or so, but not for regular use.

Well, what happened was that in the old plant, which burned natural gas too, the fire-box heat was such that the combination of oxygen and nitrogen--it's too complicated for me to try to explain it technically--did not take place. But in the new plant the heat was so intense that this association, this nitrogen effect unexpectedly took place. When it went up the stacks it was a combination of nitrogen and I don't know what, but it wasn't what you get in sulphur-burning oils. I don't think there's any sulphur at all in it. But it cost them an awful lot of money to reconstruct those fire boxes and prepare the gas before the oxygen went in.

Teiser: They would have done it without the citizens' protests.

Adams: I think so. PG&E has been very cagey about this. I think they've done wonderfully in many ways. They know they can't do it all, and they always have been pretty good. They've been wrongly accused of milking the public, but they work under controlled rates. They have to put a lot of money in plants and future prospects. Well, when you get that big, no matter what you do is considered wrong; they just accept it. I think they've acted splendidly in this--no matter what the cost, the official told me, "We mean to correct it. It might cost \$20 million, but we can't afford pollution to come out of a natural gas plant! This chemistry is confused. I don't know how we made the mistake. Somebody just left off a cipher somewhere." It's a \$160-million plant, you see. You should have seen those fire boxes when they were building them; the cooling tubes that go out to the ocean are twelve feet in diameter. The amount of concrete that's used is fantastic.

Teiser: What does it do to the ocean? Did people complain about that, about raising the temperature?

Adams: The temperature of the ocean changes about 5°, up and down, over the year anyway. The outfall is sufficiently far out that there's no perceptible effect.

Teiser: There seem to be a lot of fishing boats still around there.

Adams: Well, in fact, raising the temperature a little would probably help the fish. In some areas, raising the temperature as much as 10° has brought in a whole new set of sea life. We don't know why the sardines left Monterey. I guess they just got tired or scared of the tourists! But it's conceivable that if the temperature went up or down, then they might come back. We don't know yet. So long as the outfall is far enough out, and so long as there's no real pollution going out of the stacks, we have little to complain about. They are building great cooling towers at many of the inland atomic plants. I think it all relates to the third law of thermodynamics--I think it's the third law--you just have to get your water back to a low temperature. You think you've got all this hot water; why don't you just put it through and heat it up a little more? But it just doesn't work that way. I never could understand why, but it doesn't. I was told--I think here the pressure is, oh gosh, it's unbelievable, and the temperature is about 1200° F. It's called "live steam;" you can't see it, it's so tremendously hot.

The Sierra Club and Its Chapters

Teiser: Tomales Bay State Park I guess was a local problem?

Adams: Yes, that was local. We must give credit to the chapters for many, many wonderful things that happened at the local level. And my personal hope is the club would become sort of a federation of states like the government--a federation of chapters with a central office that is professionally staffed. And these chapters then act as entities. Their delegates would comprise a senate and the senate would run the club as a whole. If that came to pass, we'd get out of these very complex politics that's plagued the board ever since we grew to a large size. There's been ego trips and struggles to be president and lots of back-of-the-scenes pulling--that's one of the reasons why I got out. I just couldn't take it any longer. It seemed a horrible waste of time.

Sometimes the chapters would just go ahead and tend to their own knitting. They were having their own troubles, but they accomplished a great deal. The San Francisco chapter, the Los Angeles chapter--the Midwest chapters have been wonderful. And the Eastern and the Kentucky chapter, Southeast--I forget; we've got so many of them now. They've all had real accomplishments.

Teiser: They have increased in recent years?

Adams: Oh yes, we have one or two chapters accepted at every meeting.

Teiser: It's interesting that it was a western organization that they came into, rather than establishing separate ones in the East.

Adams: Well, there was the Wilderness Society, but they never wanted chapters. And the National Parks Association--they didn't want chapters either. We first had the San Francisco chapter and the Los Angeles chapter of the Sierra Club because that would better control the state. Then there was a great fight against other chapters. They didn't want the club disintegrated. And then came our Mother Lode chapter. I don't know how it really developed, because there was a great opposition to chapters in the beginning.

Teiser: Why?

Adams: Well, they didn't want to dilute the club's power, you see. And I can see that from a certain point of view. But then when we became national and a lot of the membership is outside the state, that's another matter entirely. The Atlantic chapter did a great deal of good protecting the Hudson River.

Brower moved his allegiance to the Atlantic chapter and then put a barrier up against any information. The Atlantic chapter is now broken down into several smaller ones. But when Brower transferred his allegiance to the chapter, he prevented any basic club information being published in the Argonaut, which was their paper. In all this controversy there wouldn't be a word about home policies, etc., and he even got the New York Times to write as he dictated! And we had one terrible time getting information over to the members. It was really a dictatorial coup. You talk about a Hitler situation! It was simply dreadful. I never want to go on record as ever getting soft about Brower or anything he did, because it really approached disaster. In fact, it did. I think it almost wrecked the club. I don't think we will ever be able to recover full prestige, because we got into such a bind of opposition feeling.

Teiser: Well, perhaps a shift to a chapter system is in order.

Adams: Yes, and I think the chapters will support that. They were the ones that were very mad and very unhappy when all this trouble came out. Some in the East were terribly disillusioned when they found out this information had been withheld. But the CMC, which is Concerned Members for Conservation--it cost us \$12,000 just to reach the membership of the club. We published a mimeographed sheet and addressed them to the 120,000 members, and with the postage it came to \$12,000.

Adams: We have now twelve hundred members of the Friends of Photography, and we were talking the other day about the budget, and every time they send an announcement out it's \$125 for postage and printing. Well, we have four shows a year, or five, right away there's \$1500 cost for announcements. Bigness has certain advantages, but also the administrative costs are high.

But when you want to reach 120,000 members, you've got a \$12,000 bill--it's the cheapest way of getting to them. Now [1972] a postcard would be 6¢, and printing the postcard would probably be one cent; so that would be 7¢ each! It's frightening when you think of all these things. The amount of letter writing and the amount of mimeographing and duplicating and Xeroxing--it gets to be absolutely tremendous.

When I joined the club, Nell Taggart was running the whole thing by herself with a few volunteers out of a little office in the Mills Tower. Now we have computers and a big staff and high rent and all kinds of equipment.

I remember Dr. Land saying, "Oh, the good old days of Polaroid Company, when you knew almost everybody in it." It would be a few hundred people; now there's twelve thousand Polaroid people in Cambridge alone. And then he gets worried, you know, and he says, "It's about forty thousand people in all, with the families. That's quite a city to be mayor of! And if I make a mistake, it affects that number of people. It isn't just my money or the company money. But suppose some mistake is made or sales go down and we have to lay off a certain number of workers, here's all these people to be responsible for." Well, of course, he's a humanitarian. I don't think many of the big companies are too conscious of that sort of thing. Oh, they have to give some thought to it, I guess.

But the club membership is now, I think, 130,000. It was 140,000; I think it's been losing a little. The pendulum has been going the other way. I think that's because there are so many other local and national organizations starting up. When I stop to think of all the organizations I have to support just because I'm interested, I can't possibly afford it or justify it. But I have to do the best I can. I don't mean I can't afford it. I can afford some of it. The checks don't bounce. But it's all out of proportion. We have the Friends of the Sea Otters, we have the Save the Bay Association. Now the Friends of the Sea Otters, started by Margaret Owings, is a wonderful organization. They're trying to keep the abalone people and the sea otters in balance! Then we have the Carmel Highlands Association, which is to protect this area. Then, of course, the Ventana chapter of the club. Well, I belong to the club; also to the chapter. Then there's the Native Plants

Adams: Society. There's the Wilderness Society; there's the National Parks Association; there's the Tule Elk Association; there's the Save-the-Redwoods League; the Society for the Prevention of the Sonic Boom; there's the Environmental Foundation of Saint Louis--we've gotten up to twelve, I think, and there's about twenty. I've been having to turn some down lately; I just have to say I can't do it.

[End Tape 26, Side 2]

[Interview XXIII (Sierra Club Interview IV) -- 13 August 1972]
[Begin Tape 27, Side 1]

[At this interview, Beaumont and Nancy Newhall and Helen M. LeConte were present part of the time.]

Teiser: When you were on the board in earlier years, was there ever such a conflict as there developed in the sixties? Were there ever factions?

Adams: Nothing like that, no. There was a great Southern California faction, which wanted more development because they were so far from recreation, and they were talking of seceding from the club and forming their own club. But there was nothing that wasn't controllable, if you know what I mean.

We got the Clair Tappaan Lodge [near Donner Summit]. That's in memory of Judge Clair Tappaan, and that was built with club funds. And I think some of the southern people resented all that money going into a big place for skiing for Northern California people. And then a lot of the Southern California people were all for the Mineral King development because there just isn't any skiing really closer than Mammoth, which must be three hundred and fifty, four hundred miles away. And to a lot of these people, skiing is very important. Of course, there's the Desert Peak section, and in wintertime they climb the desert peaks. But I don't think it's too thrilling, except when they get up into the Ruby Range. I think the Southern California group are all for us now, and we have several other chapters around there. I never can remember them. There's the Los Padres chapter out of Santa Barbara, the Ventana chapter here, the Desert something chapter, then one down in San Diego. I never can remember them all. Really, I think there's nearly fifty of them, all over the country.

Teiser: I think you once proposed ejecting the Los Angeles chapter.

- Adams: Well, now you're bringing up an important point. I'd forgotten about that. They wanted to publish books under their own imprint, and the Sierra Club felt that the Sierra Club imprint should be on all books put out by the Sierra Club. And the chapter could be a secondary--get full credit. But they didn't want to see a book published by the "Southern California chapter of the Sierra Club," because that would open all kinds of uncontrollable situations, where a book could be done by the "Bejeezus Chapter" in Nebraska, and there's no way to control it. And the bylaws read that publications and so on go through the central publications committee. So they got very nasty and insisted, and I said, "Well, if they insist on doing that, I propose that we rescind their charter." I was persona non grata for several years down there. But most of the stalwart members agreed; it was the hotheads which put up the fight. They are now the staid establishment. [Laughing] It's been thirty years, you see, at least.
- Teiser: When you first went on the board, you were thirty-two years old only. Do you have anyone that young on it now?
- Adams: No, I don't think quite that young--pretty close. I think some of the women say they're that young. [Laughter] We're after intelligent youth! But the trouble is, you see, that a board member now is in a very difficult position, because it's no longer a small organization. We have a budget of about \$3 million, and the people on the board have to be "in the know;" they have to have some experience. You can't just have somebody come in with random ideas. In my case, I know so little about finance, and law and lawsuits, that I was not very effective. And I think that's why the chapters got together and developed what is now the council, to which they send delegates.
- When you join the club, the service charge to get your name on the club is almost equivalent to an initiation fee. You know what it means to get your name on all these lists. It goes to publication, it goes to chapters, it goes to the groups you're interested in, it has to go to the accounting office, and it all has to be referred back and forth, you see. Once you're defunct, then it all has to be changed, and that's why the computer techniques have been so helpful.
- Teiser: Did you ever have any doubts about the value of having the club grow so large?
- Adams: As a club, yes. Farquhar and the others felt that was very bad. It should be an elite club with a definite purpose. We should tend to our knitting, stay with the Sierra Nevada, not get into things like population control and political involvement in problems like pollution.

Adams: There are certain other organizations that are really tuned to do certain things--the Society for the Prevention of the Sonic Boom, for instance (I forget the exact name), and other outfits. Our relationship to them should be warm support and contributions, but we shouldn't spend our time worrying about the sonic boom, because other people are doing it. We should support the opposition, but that is a different thing from opening an office for that purpose, you see, putting major emphasis on it.

Estuary control--there's several organizations that are very potent, especially in the East, on estuary control. Well, I think our function is to support them. But we don't have to get mixed up in it, as long as it's being taken care of. And I think that was the basis not so much of the growth but of the scatter. Any individual and any organization can scatter just so much and survive.

Teiser: What does the Wilderness Society do? Does it narrow its functions?

Adams: The Wilderness Society is a great enigma to me. They're a wonderful bunch of people. It was established by Robert Marshall. You see, Louis Marshall was a great New York lawyer--civil liberties--one of the great characters. People equated him with Brandeis. He was quite a man. He had three sons--George, Robert,* and I forget the name of the other one who is now keeping the firm going. George Marshall dedicated himself to conservation and civil liberties. The sons got about equal division of the estate, which was about \$15 million, so they were all perfectly happy and could do what they wanted. They've made wonderful contributions.

Teiser: Do they have a large membership?

Adams: It's fairly large. It's fairly elitist. They just concentrate on wilderness. They have representatives in Washington. I would say that 90 percent is directed to wilderness protection programs.

Teiser: Do you feel it's done valuable work?

Adams: I think it's done probably very valuable work, but it has that peculiar static quality which has no power at all to excite people except those who are already in the know. And the same for the National Parks Association. Its publication [National Parks and Conservation] is about the dullest magazine that was ever put out. The Wilderness Society's isn't much better. But all the experts can read it, and it has wonderful text and articles. There's no "lift" to these things. You look at that magazine and you really don't want to join. You don't have any incentive as you do with the Sierra Club. The Sierra Club has been flamboyant, and before it was flamboyant it was very positive and scholarly.

*who died in 1939.

Teiser: But still understandable to most people?

Adams: Yes, and I think very inviting, where I frankly don't think the others are. And yet in their way I guess they do marvelous work. The National Parks Association is primarily out to help the parks and criticize them. But the Sierra Club gets into everything, almost everything.

Sierra Club Publications

Teiser: Was Brower's concept that it should be a "people's" club?

Adams: Well, it was that to a certain extent, but Brower just decided that we had to increase membership. So I guess then we became a people's club on account of the appeals, which were very good. That's a very interesting analysis. We were showing about a 14-percent-a-year increase in membership, and Brower said, "This is entirely due to the book program." Well, all the other organizations went up about the same rate. Maybe the books stimulated it; we don't know. We know that we got a lot of members through the books, and we sold a great many books and we lost an awful lot of money. But I think the books did a certain amount of good. I think the first book, This is the American Earth, and the first Porter books really had an impact. Again, they're elitist books, at \$15 to \$25 each. They reach people who are usually already sympathetic. They offer confirmation of ideas and ideals. Now, when the paperbacks came out, the books reached another audience and much larger. I was pleading for paperbacks for years. Finally they did it.

Teiser: Didn't they come out ahead financially on the paperbacks?

Adams: Paperbacks are a very simple thing: the club gets 6 percent royalty, no costs of production whatsoever, and 3 percent of that goes to the authors and 3 percent goes to the club. And I pleaded with them when we started the American Earth. I said, "This is fine for us to do it; we've got backing, we've got money." The McGraw Foundation gave \$15,000 and a \$12,000 loan, and we put the book out, gave copies to congressmen and the legislature, and people bought thousands of dollars worth. That was fine. But I could see right away that we had no machinery for publishing, and I tried to convince Brower, who knew a little of publishing, that his projections were quite unsound financially. You start out to do a book to sell for \$25. You only get \$15 for it, so you have to keep your cost down to \$4 or \$5, and you add 5 percent for publicity. Well, when it all ended up, the costs went up to \$7 or \$8, and the publicity was 10 to 15 percent.

Teiser: In those books were the authors and photographers paid regular commercial fees?

Adams: No, that was a very sad thing. Brower would not admit need for a contract. There was a great struggle to get any kind of a royalty at all. There's two bases for royalties. The ideal royalty is 10 percent of retail sales. In other words, if the book sells for \$10, the author gets a dollar. Well, at present, in many cases they pay a royalty called 10 percent of invoice, which means the publisher takes in so much, and you get 10 percent of that. Well, it usually comes out to about 5 percent of the retail sale price. So there's a big argument there. Certain books certainly should have 10 percent, low-cost books that have big sales. But when you get into these very elaborate things like the Sierra Club books, the cost already is so high that it would make the retail price excessive.

Beaumont

Newhall: Ansel, for the record, you and Nancy are getting 10 percent list price on This is the American Earth.

Adams: Well, are you sure of that?

B. Newhall: Yes.

Adams: Well, we held it on that, then. But of course that's been printed and printed and printed.

The cost of producing a book should include the cost to the author or photographer. Now, for the Glacier Bay book, Dave Bohn got a \$7500 advance to go to Glacier Bay for several trips and do the book. He spent about all of that, because it's pretty expensive going out for a couple of summers, flying, etc. When the book was out, he said, "Well, everybody's happy. It's one of our most beautiful books, so I certainly would like to get some royalties. I need it." Dave [Brower] said, "But you did have some. You had \$7500 advance royalty." It wasn't that at all. The \$7500 should have gone into the cost of the book, and then partly controlled the sales price of the book.

If Nancy goes around and researches on a trip and spends \$1000 or \$2000 out-of-pocket expense, that shouldn't come out of royalties; that ought to be downright expense. Then a studious, scholarly person working in a library or at home, he has much less expense. But still, he has stenography and all of that, and I claim that should go into the book production costs and be perfectly free of royalties, which is what you get for your time. Does that make sense to you?

B. Newhall: It makes sense, but you never get it--never.

Adams: Well, it depends how you insist on it. The danger is--if you insist on these things, they say, "Well, we'll cancel the book." This Authors Guild is a marvelous organization. They're something like the ASMP in photography; they go to bat for you. But the Sierra Club never had good contracts, and we had a lot of trouble with that. The earlier books that were published were just for an honorarium, you see. People would write for the Sierra Club Bulletin and get ten copies of the Bulletin. It wasn't a commercial thing. But when it got into doing books for public sale and getting professional people, then you had a very different situation, and one that's been fraught with all kinds of trouble.

Teiser: Your photographs and those of Cedric Wright had appeared in the Bulletin. Were you paid at all for them?

Adams: Oh no. Those pictures in the Bulletin were all gifts. And pictures in books and things were all part of the obligation, based on the fact that it wasn't a commercial organization. It was private, and it was small. It's like if the American Academy of Arts and Sciences wanted a picture for an annual bulletin or some special thing, I would give it to them. It would be a donation. I wouldn't charge them \$25. Although, if it was something I didn't belong to, I'd say, "What's the budget?"

But for the Sierra Club--people like Philip Hyde have just worked like dogs and with great expense, and I'm sure he's never gotten back what he deserves on it.

Teiser: You went on the editorial board of the Bulletin in 1928, I think it was, under Francis Farquhar as editor.

Adams: Yes. Well, I was supposed to look after the picture end of it. And of course we had terrible photographs to contend with--you know, snapshots. People would go on trips and make snapshots, and they all might have historic interest. And they'll be "Stephen T. Mather at Mather Pass"--some lousy out-of-focus snapshot. Well, we had to pick the best ones. But in those days, the club--you have to make this distinction--it was in a sense an elite, private organization that was composed of dedicated people, and those who ran the club had adequate means.

We were talking about the number of young people that were in the club in the twenties and thirties that dedicated themselves to it. They didn't all have means. People like Lewis Clark, for instance, worked eight hours a day for the Telephone Company and spent their next eight or nine with the club. Nathan Clark, his brother, was that way too; he was a scientist. And other people now, like Will Siri, who's a professor of biological physics at the Donner Laboratory. He works so hard for the club that the head of

Adams: his department just had to give him a little warning that he was spending too much time and energy and mustn't forget that he's got a professional job.

Teiser: When David Brower came on the editorial board, and that was in the thirties, I think, he was working at the University of California Press, was he?

Adams: He was at the Press. He was absolutely dedicated to the whole idea of the club, and he said he'd like to have a job in the club. Of course, the idea of a \$6000-a-year salary was an extravagance which we never had even dreamed of. I remember urging it over and over: "If we get this man, it'll pay for itself." Dick Leonard supported me, and Dave gave up the position at the press, which had tenure, and took a very considerable cut in salary, with a gentleman's agreement that it would be raised if possible.

Well, as Dick Leonard would say, for the first several years he was simply marvelous.

Teiser: As editor of the Bulletin?

Adams: Oh, everything--just sort of running the club. He was executive director.

Teiser: Oh, this was in the fifties. But he'd been editor of the Bulletin until then.

Adams: Oh, he'd been very important as the editor of the Bulletin. And he knew enough about printing to be very, very valuable. And remember, he was a very prominent mountaineer and climber, a very active person.

Teiser: You'd known him since he was a youngster?

Adams: Yes. And he was a great climber, one of the really great rock climbers. And he did skiing. A true extrovert, and had great energy and everything that goes with it.

Teiser: He was earlier a publicity man for Yosemite Park and Curry Company?

Adams: Well, he went up there for a year or so because he thought he could get into Yosemite and do something, but with the perfectly ghastly advertising and publicity setup they had there, he was thrown out pretty quickly. They didn't care any more about conservation than you do about the eradication of snails in the Gobi Desert. [Laughter] The man that was appointed advertising man after him was the one who was selling toilet tissue, napkins, and paper goods for Zellerbach. The agency recommended him as a good salesman! That's the way the

Adams: company thought. I took this man to lunch one time and talked a little bit about our problems. He just frankly said, "This is all beyond me. My job is to sell accommodations and make money for the company. I don't know what you're talking about."

On the other hand, Dr. [Donald B.] Tressider would have a two-faced put on--you know, he'd be the patron and everything on one side, and then turn around and be an extremely cold-blooded and rational businessman on the other. That did a lot of damage to Brower. I think that's one of the things that probably made him lose faith in institutions. I thought of that several times. Of course, they have to make money or they can't exist; you can't give away rooms. But you're supposed to be controlled by the government, and you're supposed to try to work with the Park Service idea and make money within that framework. Well, they weren't, and I think that was maybe a trigger. Those things happen, you know. I know I had a terribly sour attitude towards Yosemite people for years.

[End Tape 27, Side 1]

[Begin Tape 27, Side 2]

Teiser: You were talking about Brower being disillusioned.

Adams: Yes, I think he was just like I was. But of course we were disillusioned because of the troubles we had with them in Yosemite with our concession, and also in their general attitude. But I think Brower harbored an idea that nothing mattered except his ideals. To be rational is more of an effort than some people can take. You know what I mean by that. There are certain techniques-- Carry Nation and the hatchet--which undoubtedly get results, like Ralph Nader. But in the long run I often wonder. Maybe they stimulate action, but the action doesn't continue if it's not rational.

Zoning

Adams: I'm so scared of the backlash, which you see coming now, in many, many ways. Zoning is being questioned, for instance. There's a development in Southern California which is suing for millions of dollars, for zoning decisions. That scares me, because zoning may not be based on sound constitutional grounds. It's almost a permissive thing, and it's always open to variants. If you can plead hardship, you may get a variant. We see that here all the time. The artichoke field here may be 160 housing units some day.

Teiser: This tract is between here and Carmel?

- Adams: It's the tract that's on the east side of the road. (The west side of the road is going to be in the state park area; it ought to be the section near the hills.) But we think we can stop it because of the sewerage situation alone, and the tax structure of the schools. I mean, it may not be big enough to justify a school, but too big for the existing schools.
- Teiser: Has there been some zoning at Big Sur or has there been contemplation of zoning down there--?
- Adams: Oh yes, Nat Owings and others did a perfectly magnificent job in what they call "The Big Sur Plan," and it did relate to land preservation. In other words, if you have property on both sides of the road, and you do not build on the one acre on the ocean side of the road, you can have two or three dwellings per acre on the other side of the road. They can't tell you not to build. A lot of people have cooperated and some haven't; some have been very bad. The Monterey County planning commission comes in and gives a ruling, and the next thing, the local supervisor is besieged with letters and threats from the opponents. The board of supervisors hearings are always open, and people with rulings against them come in with tearful pleas of hardship. So the board, which is usually one vote over the edge toward business conservative, grants a variance. If there were just one vote the other way, we could be assured of more protection.

You see, south Monterey County (inland) is oil. Then there's the Salinas area, which is largely agricultural, but some people want to make it industrial. And the board is pretty smart there; they don't like that.

Then there's this Monterey Peninsula side, which serious people think should be a separate county. Our aesthetic and protection efforts here shouldn't intrude into the sound business progress of the larger area of the county. It gets very complex, with many checks and balances.

Well, the Sierra Club was always interested in this type of legislation, but they never got into specific zoning problems until lately.

The Sierra Club Decision-Making Structure

- Teiser: I think at some point Walter Starr made a study of the organization of the club.

Adams: Let me assure you, there have been many studies of the organization. None of them have gotten anywhere. There was an organization committee. As far as I'm concerned, it was a flop decision--nothing happened. One report was made by the man who was the treasurer of Duke University; he's a nice man, smokes a pipe, and he's very slow and doesn't have too much imagination. I guess Duke University is all right, but I saw things go on that I couldn't understand how our financial expert couldn't see himself. He just didn't notice them. I hate to say this on the record, because he's a nice man and absolutely honest. But Lewis Clark, Nathan Clark, and a group made a scientific analysis of the club. I think Tom Jukes helped in the analysis. One man who worked for the PG&E or the Telephone Company statistical department, very prominent in the chapter--he made a mathematical analysis and a chart of what we should do. There's nothing that's ever really come to pass about it; the response has been, "Well, it'll be nice to do it, but..."

Teiser: How was the decision made, then, to have a full-time director?

Adams: Well, the fact that the club was growing and we just couldn't leave it to voluntary help. Colby was getting out, and I and others had no administrative ability. People like Lewis Clark would come in and do something valid and would be joined by others. All would work on a fragmented basis. Dick Leonard was tending to everything he possibly could, but he realized we had to have one good man to be responsible.

The system is this: there's a board of directors, and they appoint the executive committee. The executive committee can make very important decisions, but they are all subject to review by the board. Theoretically the executive committee actions could be criticized by the board, but that has very rarely happened. There's been a couple of times when the board questioned some actions.

Then, under the executive committee are the other committees--the publications committee and the outing committee and the mountaineering committee. They are responsible to the executive director who, in turn, submits their decisions to the executive committee, who makes the final decisions, which are then subject to the final approval of the board, which is given at an annual meeting.

Teiser: Was it the board who decided upon the fact that there should be an executive director, or was it the president, who was then Leonard?

Adams: No, I think the executive committee agreed and the board supported their action. We did a lot of things by telephone in the early days. We'd call up and say, "What do you think?" and if there'd be an obvious majority, we'd go ahead. Now, that's not entirely legal! In the Friends of Photography, we must address every

Adams: director by mail and get a letter back from all, to make an action binding. If it's a simple single proposition ("Should we raise the salary of the janitor?"), if we get a majority of letters back saying saying, "Yes, we should do that," then we can say that's as effective as a meeting. But the Sierra Club's never been able to do that--legally. They haven't done it at all lately, but when the club was small, they would just take a consensus over the telephone. It was perfectly good. You know, they'd call me up and they'd say, "Such and such a thing has come up--what do you think about it?"

"I'm all for it."

"We'll put you down 'pro'." And if they got a majority of pros, they felt safe to take the action.

Teiser: So it was still really a small community that was acting--

Adams: We were all considered gentlemen, and no political shenanigans were going on.

Teiser: Brower had been on that board just before the war for one term, I think. So he knew how that worked.

Adams: Well, the board was like no other board that I've ever heard or known of. Leopold* used to get so absolutely furious (I would too) that instead of sending out all the agenda data in advance so the board members could think about it, we'd just start out from scratch and spend hours nit-picking. People would come from the East and the Midwest and the South and the North, and spend two hours on a little point that the assistant director should be able to handle with prior dispatch.

Teiser: Has that been changed in recent years?

Adams: Not too much. They spent five hours trying to select the president this last time. Larry Moss was politicizing--trying to be president--and Judge [Raymond] Sherwin was being supported as incumbent. He's a very fine gentleman and I think he didn't speak up as he should have in his own behalf. But they spent all these hours of wasted time. Finally he got in by two votes. Well, Larry Moss is going to be president next year. Maybe he wants to get Brower back. If that happens, I'll resign from the Club. Then it's--I no longer want anything to do with it. It'll become kind of a political thing like the Democratic National Convention--or the Republican. [Laughs]

*A. Starker Leopold.

Leadership Conflicts

Teiser: When Brower was going well, so far as everyone knew, in the fifties and early sixties--

Adams: He was going extremely well. And that's the tragedy. He was an extremely capable, intelligent and forceful person. And I recommended him.

Recently I put up a terrible fight that he shouldn't be honorary vice-president of an organization he probably wrecked. And I would not receive my honorary vice-presidency if he got his.* I just couldn't see it. But I still proposed him for the John Muir Award, which is an objective appreciation of work in conservation. Some people can't see that makes any sense. But one is an objective thing for what he did, which was tremendous. And the other relates to the organization, and I just couldn't agree to it.

Teiser: In about '65, I think it was, Joel Hildebrand was going to resign as honorary vice-president. And Alexander Hildebrand and Richard Leonard offered to resign from the board because they thought the finances were--

Adams: That was it--the finances were getting very bad. You see, at the board meetings we have often what you call a caucus, which is a meeting which has no power and is off the record. In other words, it's just people getting together and making decisions to avoid later argument of the board. We find out, how are we going to vote on this? Let's get the arguments thrashed out now. And so we'd fight it all out and find that it would be five to seven, or eight to four, etc. So when it comes up before the regular board, people vote accordingly. We've already discussed it.

Well, Leonard told us about the finances and the certain things that had been done like putting up restricted funds as collateral, which is not legal. And that every director, at that time, was responsible for about \$60,000 in cash, as a trustee of a public fund. Well, I've heard lawyers talk back and forth and say it's not true; but Leonard declares that in a public trust like the Sierra Club, which has taken public monies, the directors are, in effect, trustees and are personally responsible.

Teiser: Alexander Hildebrand was offering to resign from the board, and Joel Hildebrand was offering to resign as an honorary vice-president.

Adams: Yes. Well, they just didn't like the ethics involved, which was very shady in many cases. It was a real fracas! I don't really blame them. The club had meant something to them, and now it was

*Ansel Adams refused the honorary vice-presidency in 1971 and 1974, accepted it in 1978. David Brower was elected honorary vice-president in 1971.

Adams: getting to be a kind of problem, you know, financially and otherwise, and they didn't want their names on it. They wanted me to get off, and I didn't see that I should. I said, "Well, somebody has to stay on the board."

Well, then it came out that, seeing as I had gone on the record at the meetings for three years in opposition to the fiscal policy, in case the club did collapse I would be free of obligation--I and a few others--because we had opposed this policy. Which meant that the ones who had favored the policy would have that much more obligation. [Laughter] We're talking about \$100,000 apiece there; it was really pretty serious.

It got to a point where it might be going to the attorney general. In fact, I was in favor of cleaning it off. Couldn't do anything with Brower. The president was too weak. He wouldn't control him. Wayburn said, "If I oppose Brower, why, the membership will rise up and put me out of office." I said, "Well, look, you've got to do your duty, and if that's what the membership wants, that's not your problem." I said, "I'd be very glad to be thrown out of office if I am standing up for a principle." It's a strong ethical point. And a whole year went by when Brower just went berserk, and Wayburn finally had to make some directives. It wasn't the opposition he expected at all--only about 10 percent.

Teiser: That was the directive to take fiscal responsibility away from Brower?

Adams: Yes. That was first taken away, and then he was just discharged. It should have been done two or three years earlier. Firm action might have helped, but nobody did anything.

You have the term "ostensible agent," which is a very tricky and very involved thing. Suppose that you have an organization and I'm working for you, and I have an executive position in it, and I go out and spend money and buy and sell, and it goes on for several years, and there's no opposition. I'm not restrained in any way. It's assumed that I represent you. Therefore, anything I do, you are responsible for. Leonard simply said, "Well, on the principle of 'ostensible agent' the club is responsible. Let's face it." That was the thing that was very nerve-wracking, because we were then nearly \$400,000 in debt, which is a lot of money, especially when some of the collateral for it shouldn't be applied. It was a pretty serious business. It's a very complex thing.

Brower has great charisma, and he has an army of devotees who think he's just the second coming. Bill Turnage was up north recently trying to talk to somebody up there and explain the history, and the man said, "You're just crazy. You're influenced

Adams: by Adams. You work for Adams, and Adams is absolutely wrong." Turnage said, "I have read into this in great detail and from many, many sources, and my opinion is not based on Adams's opinion."

Teiser: Do young people who are emotionally involved with ecology, do they admire Brower?

Adams: A lot of them, yes. A lot of them just go to the spectacular-- and the Christ, the Messiah element. And the Messiah involves doing away with all worldly things, so then money means nothing. Material things mean nothing. Thoreau was a perfect example, although he was far more practical-minded than a lot of people care to imagine. He had a hostile, paranoid situation, and he withdrew from the world; he became a hermit. But he went back to Boston to get food every so often and tend to his affairs. I'd never trust him around the corner!

I think Muir was very naive. But as somebody pointed out, Muir married a quite well-to-do woman, and could run a nice farm and do what he wanted to do. George Marshall is another example of somebody who's just marvelous and lives in a world of abstract theory, and he can afford to. But the nitty-gritty of it is, if you're going to do this, it is going to cost so much money, and where does the money come from? The thing that gets me absolutely in a state of panic is that this Christo gets \$700,000 to put that curtain up in Rifle Gap. Why don't the conservationists start yacking when he covers the rocks, takes half a mile of seacoast rocks and covers them with a plastic, and gets hundreds of thousands of dollars to do it?

Teiser: Brower himself, on the other hand, I gather, led quite an ascetic life.

Adams: His own personal life--family--was all right. But he certainly would fly first class, build up bills at restaurants. He took two of his staff first-class to the Frankfurt Book Fair. He was running up a \$700-a-month bill at the Alley, the little local restaurant. Anybody comes to town, he'd take the whole staff out to lunch, put it on the chit. Dick Leonard was acting treasurer and began to see these things come in. Oh yes, then he had a contingency fund, which was raised to \$20,000--shouldn't have been that much. It was \$12,000, then went to \$15,000. I remember then it went on to \$20,000. He just took \$5000 of that and founded the John Muir Institute, of which he became president--which was an awful thing to do.

Teiser: That's still in existence. Is that still his--?

- Adams: Oh yes. That's still his baby. The Friends of the Earth has gone in the red, but the John Muir Institute is apparently the nest. But that was founded, apparently, with Sierra Club money. So you see, the whole thing is very questionable--
- Teiser: You said, and other people said too, that Brower alienated people who could be helpful to the club--
- Adams: That was the greatest loss we had.
- Teiser: If he alienated those people, whom did he entertain?
- Adams: He entertained activist conservationists, individuals who were on his side. But the people that you have to work with, like the lumber people and the power people and the government, and so on-- the National Parks and Wilderness [Society] people--he alienated those; they wouldn't talk with him or the Sierra Club. We were completely out of communication for quite a few years. They simply wouldn't talk to us with that man Brower at the helm; they didn't want to be insulted.
- Teiser: He was personally insulting?
- Adams: Oh, he was terrible. He'd make accusations that were just absolutely uncalled for.
- Teiser: How did it happen, do you think, that he changed so?
- Adams: Well, he got bit with the power bug. Somebody probably instructed him in activist method--which is a very common method. It's the method of dictators, the method of people like Nader and Carry Nation and maybe William Jennings Bryan. They're just absolutely ruthless. The end justifies the means, put it that way. You don't get anywhere by being polite, says Brower, so you just go out and raise hell. Well, that isn't exactly true. It might be superficially true, you see. You might cow people into certain responses, but it doesn't--
- Teiser: Who in the club was for him?
- Adams: The majority of the board were for him for several years. The man from the Northwest chapter. There was Larry Moss. Martin Litton was one of the most dynamite characters. He's absolutely--well, I don't want to be libelous--but he's one of the most irrational people I know of. And Will Siri would vacillate, one side to the other, which I never could quite understand. Wayburn would vacillate one side to the other--politically involved. I'm just trying to think of these other people. Well, there was a majority. There was eight people, always, that Brower could count on, and that's a majority if you have fifteen directors. Of course, the point was that some of the ideas were terribly good.

Adams: August Frugé was always much on our side. I can think of our side as being August Frugé and Dick Leonard, Lewis Clark--Lewis Clark took a year or so to come around--of course myself; I think the treasurer was pretty much. But the thing that bothered me was they weren't quite definite, which meant they really didn't know all the things. I'll have to get the board of directors list to be able to pinpoint them. Do you have the list here?

Teiser: The last one I have here is '63.

Adams: Well, there's lots of names on there I can--

Teiser: [Reading] Edgar Wayburn, Nathan Clark, Charlotte Mauk, Clifford V. Heimbucher, George Marshall--

Adams: Marshall vacillated, although he was finally very much against. Mauk was always torn because she always admired Dave as an individual that climbed, and it was very hard for her to realize the truth. You know, you have people that are old, old friends. Nicholas Clinch was somebody that had to finally agree. He was just stretching it, trying to say, "Well, the man--you can control him. He's all right." Then when he saw the figures he finally said, "I can't--I have to vote against him."

Who else do you have there?

Teiser: Pauline Dyer. This is '62.

Adams: Dyer was very much pro-Brower for quite a while. I don't know whether she's ever changed.

Teiser: Jules Eichorn was on the board in '62.

Adams: Yes. Well, Jules Eichorn was involved for quite a while on a matter of principle. Then he shifted.

Teiser: Leonard. Bestor Robinson--

Adams: Bestor Robinson was absolutely on our side all the time.

Teiser: R. Clifford Youngquist.

Adams: Youngquist was all for Brower, as I remember.

Teiser: Randall Dickey.

Adams: Randall Dickey was first for him, and then I think realized what we were up against, and he was very valuable in the CMC procedures.

Teiser: Harold E. Crowe.

Adams: Crowe always was on our side.

Teiser: And Harold C. Bradley?

Adams: Bradley was on our side.

Teiser: Phil S. Bernays was--

Adams: Bernays was on our side.

Teiser: Francis Farquhar. Where did he stand?

Adams: Oh, he was always on our side. Colby just said, "Brower is going to wreck the club" and so did Farquhar and Heimbucher.* They both had analytic minds and they could see the direction in which it was going.

Well, just to give you an idea, he put out a color flyer (what we call a "flyer" in printing, you know--it's an advertisement that goes to book dealers), he put out one of several pages, 250,000 printed, and it cost about \$48,000, but it came out after the bookselling period. You know, books are sold to dealers primarily in July and August, and this came out in September. Spending money like that--\$40,000, \$50,000--that kind of stuff!

Publication Problems

Adams: But one of the techniques that Brower would have, was applied when he put through the Galapagos book [The Flow of Wildness] with Porter-- I don't know how Porter feels now. I think he must be pretty much ashamed of supporting Brower so strongly. But he's off the board now.

Brower wanted to do the Galapagos, and the publication committee said it was outside our field, too specific. They turned it down two or three times. And then it was taken to the executive committee and they turned it down. Finally Brower went to the board of directors, reporting on what he was doing, and so on, and said, "The Galapagos book is now underway." And they said, "Well, Dave, that's never been approved." "Oh," he said, "I thought it had been," which is an absolutely bald-faced lie. All the records showed there was no possible approval.

*Clifford V. Heimbucher.

Adams: "Well," he said, "I don't know what we're going to do. The plates are made." And that was the time when we should have said, "We are sorry, David; we think that's your responsibility." And then Dave's supporters said, "Oh no, no, no. The club is responsible." That's the time we unfortunately didn't crack down. We should have cracked down terribly hard and just said, "All right, no matter how many thousands, it's not authorized, so it's your responsibility." But then came the "ostensible agency" fact; he ordered them and there's nothing we can do about it. So after \$40,000 or \$50,000 have been committed, we weaken, and he brings out a two-volume book--a complete flop and a terribly expensive thing. But that was his technique. He'd say, "Oh, I didn't know. I thought that was approved." In the meantime, he's had the work done.

Teiser: Was there one point at which you started doubting all this, or did it just gradually come over you?

Adams: No, I think--he came down here to Carmel one day, and I told him that I thought the way he was doing things, he was headed for a fall. And the trouble we had with the Glacier Bay man--Dave Bohn--we'd had a standard meeting of the board up at Tappaan Lodge, and Dave Bohn had brought his lawyer in and threatened a suit of \$100,000 unless the agreement was followed through. He had a contract [for the book Glacier Bay]; he laid it on the table. The directors were aghast. He had all the records. So we fixed up the contract with Dave Bohn without delay.

Then it seemed that a family that lived in England and Arizona (we don't know yet what they're citizens of--they must be citizens of America now) gave the Sierra Club \$80,000, I believe. (Mind you, all these figures are subject to exact analysis. It might have been \$78,000 or \$82,000. Say \$80,000.) They gave it to Dave in London. Well, he put it in the bank. It never went through the club treasury! We don't know yet what the tax situation was. There's still a potential crackdown--who gave who to what, and whose was it? Who received it? Dave received it in the name of the club and put it in the bank. But Dave had previously gone to London and set up a London office, and the directors knew nothing about it until we suddenly found out that we had a London office!

I think it was Dick [Leonard] who called me up and said, "Do you know we're in London now?" I said, "What do you mean?" "Well, I've just been informed we have a London office with a staff." I said, "What do you mean?" He said, "Well, Dave decided that was necessary."

Teiser: What had Brower come down here to talk to you about?

Adams: Oh, that was I think in relation to the Dave Bohn book. I think that was it. It was a bit vague.

Adams: But then this English thing went on, and then the interesting thing was that Dave published several books in the name of the club, using this money, which had never gone through the club treasury, you see. He never embezzled anything for himself.

Teiser: Was the check made out to him?

Adams: The check was made out to the Sierra Club, and he simply endorsed it "Dave Brower, executive director" and put it in the bank.

Teiser: Whose account?

Adams: Barclay's in London.

Teiser: But I mean, what account?

Adams: A special account; just a Sierra Club account.

Then he got these new books underway. And we said, "Well, what's going on? What's all this funny business? We'll have to straighten this out. What are you doing with the money?" "Well, we're publishing books." "What books?" Well, one [of the books] we knew about; the other one we didn't know about. I think it was Lewis Clark who said, "Dave, this is worrisome. We've got the contracts, I hope." Dave said, "No." "Well, what document have you got?" He said, "Oh, I've got plenty that will document it."

He had only a Xerox copy of the first page of the estimate! That's all he had to justify all this stuff. In the meantime, they had received a letter from a friend in London who had understood that a certain printing house was going to do these books. The friend said, "Look out for them. They're tricky as they come." So here we were with the idea of spending money which we didn't have-- in our name, by our ostensible agent, without any knowledge of tax situations, and no firm contract. There's been no trouble over it yet, but it was a highly irregular procedure. That's the kind of thing we had to contend with.

Teiser: Of course, his background was in publishing, so I guess he saw publishing ventures as an important activity, but didn't he also take considerable part in conservation projects?

Adams: Oh yes. He involved the club in many things without authorization. Some of them very good, some of them very questionable.

Conservation Conferences

Teiser: I think there was a whole series of biennial meetings on conservation at the--

Adams: The Wilderness Conference--I think that that was suggested to Brower by the board, but was formulated pretty much by Peggy Wayburn. That was a very fine concept, and I think it's been as successful as anything of that kind can be. You wonder what happens. People come; they all agree. I suppose it's like a medical convention, but at a medical convention people learn a lot about new techniques and everything. I suppose the Wilderness Conference did give constructive reports, but I attended two and they were the dullest things I've ever been to in my life. [Laughter] Stuart Udall gave a pretty good talk at one. At the last one they had, I think Rogers Morton spoke, which was a catastrophe because he wasn't prepared for it.

Teiser: So you don't feel those were very valuable activities?

Adams: I don't know! The exhibits were terrible. Such meetings are composed of 90 percent sympathetic people talking to themselves.

Teiser: I think Norman Livermore suggested the first one in 1949, called the "High Sierra Wilderness."

Adams: Well, that's perfectly possible. But that was not--that related to High Sierra wilderness, which was a specific thing for the Sierra. But the Wilderness Conferences were nation-wide, even world-wide.

Teiser: In '35 you had sponsored a--

Adams: Oh, we had a little thing called the "Wildflower Festival" up in Yosemite, which was on conservation. And it was called the "Wildflower Festival" because it was the time of year when all the flowers were out. We had a very good crowd.

Teiser: Did you talk about conservation?

Adams: Yes, whole new ideas of conservation. Virginia must have the proceedings somewhere. Pearl Chase of Santa Barbara was very enthusiastic about it. We had quite a number of people attend.

Teiser: But it must have been one of the first things of its kind--

Adams: I think it was one of the first things in the West of its kind, yes. We took people on tours, and we had botanists and foresters talk, helping to wake people up to the Sierra Club principles of thinking in those days.

Adams: Pearl Chase is a dynamo. She is an absolute vocal firebrand. I've never known anybody who could bring forth more names, more facts, more dates, and with a terrific amount of energy. Just unbelievable.

Mrs. [Emily] Pope is somebody of that type--the Small Wilderness Group lady. It's just like winding up an electric fan. She gets things done. She saved the fine oak grove near San Luis Obispo. I haven't heard from her recently. Maybe she's exhausted. But she really accomplished a lot.

Teiser: Militant women do get things done.

Adams: Yes. They go right in and sit down opposite a businessman's desk and say, "We want this." You know, it's pretty straightforward. I think Justin Dart gave some money for that; this beautiful oak grove was going to be a trailer park. She was able to save it.

Gifted People

Adams: It's very important never to underestimate what Brower has accomplished as a conservationist. When all the brouhaha is over and history comes to the fore, ten or twenty years from now, and the financial situations are forgotten and all these other things, his actual accomplishments will loom very large. And that would be good. I'm not criticizing that. I'm criticizing the ethical, moral, and practical procedures in relation to the Sierra Club.

Teiser: Too bad he couldn't have gone along on an even keel, isn't it?

Adams: Well, maybe people like that can't. We have the same in some people in the sciences. Look at Linus Pauling. Is he twice a Nobel Prize winner? He certainly must know scientific procedures, and yet he goes out and talks about vitamin C as if he's absolutely gassed. The doctors are uncertain because there's no available tests as to what the side effects would be. But it's the great Linus Pauling, and he espouses causes like Russell* did. Some of them were absolutely irrational and had nothing to do with his extreme rationality in his field.

I know Dr. Land talks about wonderful gifted people that are the absolute apex in their own field and just plain damn fools when they get into other fields. Why don't they know enough about themselves to know they can't do that?

[Calls across the room to the Newhalls and Helen LeConte] How you all doing over there?

*Bertrand Russell.

Voices: Just fine. Just starting. We've been looking at an early Adams album [of photographs of a mountain trip with the LeConte family].

Adams: Oh, my gosh. It's probably faded. [Laughter]

I think I'd like to say something about Cedric Wright again. We didn't quite complete that. Cedric never gave money to anything. Cedric was extremely tight financially. Now, maybe he was so fixed with trust funds that he couldn't, but he was really penny-pinching when it comes to cash, but extremely generous in time, pictures, and effort. And his book, which I got through the club with considerable opposition--the little volume, Words of the Earth--has been quite successful. It still sells. Apparently it's sort of a handbook to a certain type of--what we call "flower children" type. The more tranquil, philosophic young people just love that book and its rather naive writing. But the This is the American Earth still is the one that carries a real impact.

Teiser: And it's been said to be more important than any other single book in conservation-- I've heard people say that.

Adams: Well, it started the series. Now we're trying to think about doing another edition, which is awfully complex. You don't rewrite a bible after it's done. The original stands and it may have its faults. It has some superficial assumptions in it, but the important thing to me about it is, it's truly poetic. And most conservation material is anything but poetic; it's the driest, dustiest, dismallest collection of prose writings you can possibly imagine. Just read reports! I'm not talking about Muir and Thoreau, although I don't think they were true poets. I think Wordsworth had it all over them. But the average conservation text of today--it's just terribly hard to get through it. It's like a tract or a legal statement. And how they ever expect to arouse public interest and excitement with that particular style is beyond me.

But what Nancy did in This is the American Earth is really a poem. Beaumont calls it a synergistic relationship; I call it synesthetic--the relationship between words and pictures, in which the pictures do not illustrate the text, and the text does not describe the pictures; it simply goes together. And she did the same in Time in New England with Paul Strand. It's an approach we need very much, because it can be accurate and at the same time emotionally exciting.

[End Tape 26, Side 2]

Conflicts, Continued

[Begin Tape 27, Side 1]

Teiser: Do you remember sometime in the sixties Frugé made a study of the editorial activities of the club--

Adams: Yes, he did. And I recall he came strongly out against us publishing, because he could not see any economic justification, and he said that that was not our field, but that we could initiate ideas, texts, pictures--put things together. But we really should allow the publishing to be done by a designated publishing house who had the experience and "machinery." Because we didn't have the "machinery." What I mean by "machinery" is the fact that any good-sized publishing house has several hundred items and the whole business of production, publicity and sales at their command.

Teiser: Did he suggest any specific publishing house?

Adams: No, I don't think so.

Teiser: Was there any movement to have that done then?

Adams: Well, I suggested the University of California Press, but they can't do certain things. There's always that bugaboo of competition between them and commercial publishers. They're supposed to be limited to a specific field. He didn't feel that the University Press had the machinery to do what we wanted to do. Paul Brooks of Houghton-Mifflin was a vacillator between Brower--between the ideal and the practical. They, Houghton-Mifflin, never wanted to get burned by the books. He kept out of it. Several people wanted to publish, but their standards weren't good. I can't remember all the history of it. But Frugé was always very rational.

Oh, and another director who was all for Brower in the beginning and for whom it was very painful to have to come to a negative conclusion was Phil Berry. They were climbing companions, and it was all a very difficult personal thing.

Teiser: Who are the ones left now in the group? You say there still is a group that's for him?

Adams: Oh, I would say a good part of the board is still--I think both women on the board, and [Martin] Litton. He so dominated the Atlantic chapter that the people there still hang out for him. I don't really know. I think that, being out of it as I have been, I shouldn't pass judgment on it ethically and because I really don't know. I'm just an ordinary member now. I may not be even that long, if things continue.

- Teiser: Would it be conceivable that they would bring Brower back into the club?
- Adams: Yes, very conceivable. It's also conceivable the club would go into total bankruptcy, which then means it would be taken over by the attorney general of the state.
- Teiser: At one time I think you suggested that perhaps members of the Sierra Club who objected to Brower should resign and either affiliate themselves with another organization or create a new one.
- Adams: Yes, I said that if the club had no future, then it was necessary for the people who believed in what we were doing to get together. But it was not a very practical thing because forming an organization of that kind and doing anything fresh requires a great deal of money.
- Teiser: I think there was some suggestion of joining the Wilderness Society.
- Adams: I didn't do that. I think it was a matter of diverting funds. How much funds have you got? How much money and energy and time can you spend? Now, if you want to spend it constructively--I did everything I could in relation to the club, and now I just can't do it. One can do just so much!
- Teiser: Was the Concerned Members for Conservation started first, or was the Committee for an Active, Bold, Constructive Sierra Club started first?
- Adams: The ABC was the Brower one.
- Teiser: Which came first?
- Adams: I think the Brower came first, knowing that opposition was brewing. Dick Leonard can give you the basics on that. But, you see, Brower could use club funds--did use club funds--to propagandize this organization.
- Teiser: Oh, he did!
- Adams: Yes. And we couldn't so we had to raise funds; we had to raise at least \$12,000 to reach all the members. Brower would not allow any of the dissertations or discussions printed in the Argonaut in the East. He got the New York Times over to his side. Dave's a most compelling person. He can tell you that two and two is five. If you don't watch out, you may believe it! So this is a rankling thing with me still, that the club funds were spent in this way. There's some statement they weren't, but I think the books show otherwise.
- Teiser: The CMC was advocating election to the board of you and Clinch and Frugé and Maynard Munger, Jr., and Raymond Sherwin and Wayburn. Does that sound right?

- Adams: Yes. Wayburn was my protest candidate; I didn't really trust his point of view on it. Munger switched over completely, but lost out on the board in the last election. [Raymond J.] Sherwin is still president and is, I think, quite rational about things.
- Teiser: Mr. Leonard gave us these Xeroxes when we were talking to him. He pulled cards out and sent them out to be Xeroxed. They're the results of the board elections for '67, '68, up to '72.
- Adams: [Reading the Xerox of the 1972 election] [William] Futrell is the one that took my place when I resigned, but he apparently has gone back to Brower. [Paul] Swatek I don't know. Frugé is in, and I don't know [John] Ricker. Munger's out. [Edwin] Royce, [Kent] Gill, Matthews and [Anne] Van Tyne are out. Van Tyne was a very active and very good lady down in the Santa Barbara area, and yet she lost heavily.

[Reading the Xerox of the 1968 election] Let's see, Siri. [Eliot] Porter was all Brower, [Laurence I.] Moss was Brower, [Phillip] Berry was and then changed. [A. Starker] Leopold was and then changed. [Charlotte] Mauk wasn't--she didn't run. [David] Sive was very much Brower--he was the East. [Sanford] Tepfer was Brower. Nathan Clark was no [against Brower], [Raymond J.] Sherwin was no, [George] Marshall I think was no, [Philip] Hyde was for Brower. [James P.] Gilligan I don't know. But Hyde didn't get on.

And '66--[Frederick] Eissler was very much a Brower man, and [John B.] Oakes.

Then you come to '71. [Alfred S.] Forsyth was Brower; Berry, no; Siri vacillating; Moss for Brower; [Claire] Detrick I think for Brower; and [June] Viavant I think for Brower. In 1970, [Richard C.] Sill was very much against Brower, but rather difficult in getting a decision out of him; Brooks would go with Brower; [Charles] Huestis I think was against Brower; Litton was very much on Brower's side; [Patrick] Goldsworthy was for Brower but lost.

In '69, Wayburn was Brower; Muncheimer* I think was for Brower but withdrew; Brower didn't make it. Sive was Brower; Eissler was Brower; [George] Alderson was Brower.

It still is a pretty close business. Now, of course, Leonard goes off this year. I would have gone off this year, just by the rotation law.

Teiser: That means that he cannot go back on again?

Adams: He can, after a year, I think.

*Kurt H. Muncheimer.

- Teiser: When Brower lost the election in 1969, did that indicate then a very definite split between the directors and the membership?
- Adams: No. See, you can go on the board with a petition. You have to get quite a number now, but if you get those names, you can go on, and he just didn't make it. He was petitioned all right.
- Teiser: But the board didn't take it as any indication that the membership and board were basically out of joint?
- Adams: You see, the nominating committee was named by Brower, and they threw me off. They called me in Cambridge and said, "I just hate to tell you this, but the nominating committee put all of the older members together, and they realized--well, it's nothing personal, but we need new people, and we did not renominate you." I said, "That's fine, that's the democratic process." Well, BANG--somebody started to put my name on a petition, and I came in with I don't know how many thousand votes. And of course Brower could do the same thing. I was perfectly happy to get off.
- Teiser: Yes, Leonard said you'd been trying to resign for years, and he'd been urging you to stay on the board.
- Adams: Well, I didn't feel I was very useful.
- Teiser: Was that after the Brower difficulties began, or was that even before?
- Adams: Well, before that. But when Brower was finally canned, I figured, "Well, I've done my part. I'd like to resign." Leonard and others said, "No, you can't do that, because the Brower forces are too strong."
- Teiser: You said something the other day, off the tape, about once being in Cambridge and addressing a chapter meeting. Was this at this same time?
- Adams: Well, it was during the Brower regime. The New England chapter wanted me to express my opinions on the club, and I primarily expressed the opinion that the chapters should really run the club. But I found very considerable opposition. In fact, at least a third were rather violent. As far as they were concerned, I was just an old fossil; didn't know what it was all about.
- Teiser: Are you considered a reactionary by some?
- Adams: Oh yes. Sure. [Laughs] Very much. Doesn't bother me, because I don't think I am. All of this is a relative matter, you know. I think my record is reasonably clear. I might have done crazy things; I don't think I did any definitely bad things. I know I must have made bad judgments sometimes.

Preserving Wilderness Through Legislation

Teiser: In 1963, you were given the Muir award. Was that for specific things?

Adams: Just general conservation. That's quite an honor, and I retain it because it was given at a time when it meant something. I wouldn't accept it now from the club.

Teiser: In the meanwhile, while all this was going on--I guess this was after the Wilderness Act was passed, wasn't it? Was the club pretty united behind the Wilderness Act?

Adams: Oh yes. We worked very hard for that; that's probably one of the strongest projects we have on hand.

Teiser: Were you satisfied with it?

Adams: Yes, except that again we couldn't talk directly, so we had to fight through Congress. The Forest Service people would not talk to us because of Brower. We could have accomplished a great deal more if we'd been able to be in direct contact.

Teiser: Is that right? There were some provisions in it that I think were not entirely reassuring.

Adams: Oh no, it was diluted and weakened. We had scrapped to get provisions back that were vital. But, on the whole, I think we got a pretty good thing.

Teiser: Then during this same period (I don't know how everything was going on at once--the publishing programs and the campaigns) the Northern Cascades National Park was being fought for--

Adams: That was important, and that involved the Forest Service, and it involved the Kennecott mine. The beautiful view of Glacier Peak, which is the trademark of the Northern Cascades, with this big lake in front. (I don't remember the name of the lake.) The Kennecott people are planning a copper mine situated just over the brink of this lake, placed on a lower plateau. And we fought very hard against that. I don't know what's happened to it. I don't know whether they have withdrawn temporarily. The main problem was the Forest Service cutting. Because, as I understand, the Forest Service would leave a little canyon wild but then cut the slopes around it. So many of the canyons and gorges of the Cascades that do have very fine timber could be simply ruined by even moderate cutting above. So the problem was how to establish an adequate national park.

Adams: You remember that the Kings Canyon park was developed with an "enclave" as it's called--reserving the whole floor of the Kings Canyon for a dam, from Cedar Grove on up, and I think Tehipite Canyon too. The only way we could get the park was to leave these areas out. Now, whether that's been resolved or not, I don't know. But we never could have gotten the Kings Canyon Park through if it hadn't been for this concession to [the Bureau of] Reclamation.

You see, Reclamation is under the Department of the Interior, just like the National Park Service. So you've got an internal squabble there that is really almost unbelievable--forces pulling against each other in the same department. If it were the Forest Service, you could understand, but when it becomes an intra-bureau situation, then you're in trouble.

[End Tape 27, Side 1]

[Interview XXIV (Sierra Club Interview V) -- 8 September 1972]
[Begin Tape 28, Side 1] [During this interview, Nancy Newhall was going over photographs in a nearby area.]

Teiser: Last time I lost a piece of the recording tape. We were talking about the Grand Canyon campaign. It seemed to be such a crucial kind of thing in various ways. You were all for trying to save it in some ways, I believe you said. What ways?

Adams: Well, it's very, very complicated because there were several factors. I'm not too clear about many of them. There was a series of dams to be built in the Grand Canyon--in the lower area--and the water would back up into the Grand Canyon proper. I remember us making a statement one time that "you wouldn't flood the Sistine Chapel so you could see the ceiling frescoes from a boat." [Laughter] And of course that happened to be a very gross exaggeration in relation to the Grand Canyon, because it would be very hard to see the water at all, except in a few places. But it would, of course, ruin the effect of the free flow of the river. Instead of many great rapids in the lower areas, there'd be a series of dams with their extensive lakes. I don't know yet how far up they would reach. I imagine they would go up under Hopi Point or even Bright Angel Point. But they would be very hard to see from above. So it wouldn't have been a matter of filling the Grand Canyon, like a bathtub, to the top.

Then the other plan was to divert the Colorado from near the Navajo Bridge--the eastern end of the Canyon--from a fairly high elevation, and with a very long tunnel bring it down to the lower end to, I think, the Havasupai area. There'd be these great waterfalls--power-producing falls. That would take the water out of the canyon proper, which would be very bad, and the lakes would

Adams: begin below that. I think that was probably the greatest desecration. There was a very belligerent campaign, and Dave Brower was extremely vociferous in it. The club, of course, was all against it; as is the case of many other organizations and individuals of considerable power that were fighting it too.

I think we did ourselves a bit of a disservice by not giving credit to all the people that really worked on it. This is a thing I've often felt--as with the Save-the-Redwoods League. The club simply would never mention the Save-the-Redwoods League, and yet that was the backbone of the whole redwood preservation movement. This is a kind of organization ego which I never could quite accept. I mean, not that we didn't do a great deal, but I don't think you could ever say that one person or group did it all. But, in any event, the dams are temporarily stopped.

Now, there's other dams in the Cameron area above the Grand Canyon that are planned and, I guess, many more that will serve as settling dams. You see, there's a lot of silt, sediment, alluvial soil, etc. The amount of silt is tremendous at Boulder Dam. There's something like seventy-five freight cars a day (somebody said seventy-five freight trains) pouring into it by the river flow. Anyhow, this enormous amount of material is going into Boulder Dam and silting it up. It won't be so long as they originally thought--I think they figured two hundred years, and now they say it's less than half that time, before the Boulder Dam will be just a nice sandy plateau with a wall at one end and the river pouring over it.

Of course, what that does, as far as power is concerned, is not so bad. It does do a great deal of harm to water storage. As the lake becomes shallow, you can't store as much water. Of course, the water below that now is relatively clear. But they're thinking of putting what they call settling dams (and I think they have a few now) up in the eastern areas of the Colorado. But those are going to fill up too! There are already pictures of quite a number of dams in that sandstone country that are absolutely filled up--just plateaus. The future is a scary thing to think of.

You see, with a place like the Hetch Hetchy in the Sierra Nevada, where you have granite rock, you have very little silt. You have some. The Hetch Hetchy will fill up with silt some day. When it draws down, we see mud, but that probably is more local than otherwise. Because there isn't much dirt carried down by the Tuolumne River, even in high floods. But the Colorado is always running with thick reddish silt.

Teiser: Were you implying that you thought a low dam might not be very destructive in the Grand Canyon?

Adams: [Thinking] No, no. Well, a low dam at the western end would simply not bring the water back as far, but then it would be very uneconomical; it would fill up very quickly. Putting in a dam that wouldn't work for long would be worse than putting in a bigger one that would for a time. It would be very hard to destroy the visual impact of the Grand Canyon, but you certainly could damage the quality of the bottom of the canyon itself--it would be ruined. But that's the basic problem now everywhere--how to preserve the integrity of the rivers. We have the Wild River programs, to leave rivers alone for boating and rafting and just for themselves. But the water power people in the West are very much against that, because they claim that damming up a river and using it for power and agriculture is of much greater benefit to humanity than just having it available for a few river-rapid runners. That's just the eternal balance for numbers--I mean, what is a true benefit? If you just put it on a physical basis, of benefit for the majority, why, then you could wreck everything because what's the use of having an opera if only six thousand people go and there's a million people in the area? Why spend the money? Or an art gallery--how many people see it? You know, you can just carry that to absurdity--equating quality with just quantity use.

Teiser: The Grand Canyon campaign was what lost the Sierra Club its tax free status. Is that right, or is that oversimplifying it?

Adams: Well, no. It was due to the fact that he--the Internal Revenue law clearly states that any public organization that uses funds to influence legislation loses its tax deductible status. That's the law. Well, we did put out some advertisements on the Grand Canyon which clearly stated, "Write your congressman against this." We were obviously influencing legislation. I think what did it was the final redwood advertisement along the same lines.

Now, I was told on very good authority that the IRS tried to work with Brower, telling him how he could do this and not yet run afoul of the law--get another group to do it in some way so it would be legitimately safe. But he just had a great scorn for the IRS, so he rejected the idea. Then there was nothing else to do for the IRS but let the axe down.

We had fortunately anticipated this, and we formed the Trustees for Conservation and later the Sierra Club Foundation, which by the way took in \$400,000 last year. They're doing wonderfully. And of course we can then disperse the funds to the club for purposes not influencing legislation--education and lawsuits, publications and properties, etc.

Teiser: All those years the Sierra Club had been influencing legislation by inviting a senator to lunch, talking with congressmen, all kinds of things--

- Adams: Oh yes, but it wasn't done obviously.
- Teiser: Nor was it done with any large expenditure?
- Adams: Sixty thousand dollars, a hundred thousand for one of those ads, you know that's pretty considerable amounts.
- Teiser: Did the club back Brower in those ads?
- Adams: A lot of people were very much scared and tried to dissuade him, because they knew what was going to happen. People like Leonard would say, "Well, if it happens, we have the foundation."
- Teiser: Did they like the idea of the ads themselves?
- Adams: Well, I think they liked the idea of the ads if they worked, and I think they certainly did work.

The Sierra Club Foundation

- Adams: We got a lot of support, but the tragedy was that when the axe fell and we were declared non-tax deductible, then Brower wanted to fight the IRS. So for a whole year he would just say it's costing the club \$5000 a week in donations; but never once would mention the foundation, which could have received all these donations, until finally President Wayburn ordered him to stop such statements, which he should have done a year before.

That was a very strange, vague, mixed-up period, because it didn't make any sense. If we hadn't had the foundation, then it would have been disastrous. But instead of our urging, "Well, let's try to change the law" and spend time and funds agitating for a change in the law, we just defied it. In the meantime, the money could have gone to the foundation. But Brower just wouldn't come clean with it, and of course that cost us a great deal of money--for a year.

We really did lose, because when people heard of the foundation, they were just aghast--"Why didn't you tell us it existed?" "Well, Brower's mad at the IRS." It was a monumentally stupid procedure. So I had no sympathy with it and can't understand that kind of thinking.

- Teiser: What was the Trustees for Conservation?

Adams: Oh, it was first set up as an organization that would receive monies that were not tax deductible--for certain gifts that might help the club. But that didn't work, because the club itself was still tax deductible, and the IRS said, "You're fooling yourself. You should be tax deductible." So they granted the Trustees for Conservation a tax deductible charter. But we didn't influence legislation directly, you see. I don't know really what we did; it's one of those rather vague things! The foundation, on the other hand, has done just marvelously.

Teiser: What sort of people contribute to the foundation?

Adams: Oh, everybody--individuals and organizations. I don't know the list. But it's been very successful. Then they give grants to the club. But then, you see, the club has all these lawsuits and is in great danger now of a counter suit for many millions of dollars, which some people are worried about, because we have made I think very unnecessarily harsh statements and have caused considerable financial loss through injunctions and actions that might amount to libel. We are now being sued for--I don't know what it is--\$10 million or something. So the club transferred all its property and holdings to the foundation.

Now, for instance, Tuolumne Meadows. The Soda Springs there was owned by the Sierra Club and was part of Tuolumne County and is real property. So if the club had been sued and had lost the suit, those assets would have been taken over and sold to the highest bidder. So you could have a developer trying "monkey business" right in the park. We just figured it's just something that the club should get rid of, should unload for its own safety. So all of the properties of the club, I think with the exception of the Clair Tappaan ski lodge--which I don't understand because it is a very runnable thing that could be turned into a valuable operation--the foundation has taken that over, and the club is working out a considerable debt, plus a considerable threat of suit.

Teiser: If the club should go under--I think you mentioned it could go broke--the foundation could just keep on?

Adams: The foundation is independent.

Teiser: That foundation is a good thing?

Adams: Yes, it's the only thing.

Teiser: Are you involved closely with the foundation?

Adams: No. Except--well, I'm close in a way. I'm not on the board; I didn't want to be. Again, it's an "expert" situation. You have to know far more than I know about finance and law. Wayburn's the

Adams: president of it. Dick Leonard was. Dick Leonard is really the moving spirit. It's a terribly good thing, probably the saving thing for the club. Of course, they wouldn't be in a position to bale the club out. If the club goes under, it goes under, and probably the attorney general takes over and administers the remains. Any organization that is built on public funds, if it goes broke, the state has to take it over. A bank can't. A bank could take over physical assets, but members' dues and funds, perpetual funds and all that, they have to go under the administration of the state. I don't know the legality of it in detail. But I'll be honest--it had gotten so bad there, that I almost threatened to say the attorney general should take us over. They did that with the Gold Star Mothers, who were terribly mismanaged. They took money from the public, very considerable sums, and it was so mismanaged, the state had to step in and control it. It wasn't anything really crooked. The state, you see, is responsible for the public funds--in a sense, the government protects your funds.

And there's a very interesting legal thing: If I want to do pictures for advertising, as I've done in the past--use a family and get the model releases from mama and papa and children, and then the parents sign releases for the children--those releases are really not valid, because if anything was done that would work to the detriment of the children, the state remains the guardian of the children and would step in. The father, who was a lawyer, was signing the release, but he said to me, "I know you're all right. I know this photograph is perfectly fine. But if something happened where someone misused the picture of these kids, my release wouldn't count at all, and the state could come right in and I'd be in trouble for even permitting it."

All that is very complicated! I'm not a lawyer. But I'm always surprised to get certain legal truths. Things that come out with planning and zoning and contracts.

Dams and Reservoirs

Teiser: Another of the great early battles that the club fought, the Kings Canyon one--I think you mentioned it as an example of how an organization must compromise in order to accomplish things.

Adams: Well, we were very anxious to put over the Kings Canyon National Park, next to Sequoia. I did my little stint--I went east and talked to congressmen and senators, presented the book--

Teiser: This was in the thirties.

Adams: Yes. They heard it pretty favorably, but the water people, you see, have great power, so the congressional committee would not allow this park to be established unless the canyons of the middle and south fork of the Kings and a few other areas were reserved for reservoirs. So Cedar Grove, the south fork valley, and the middle fork of the Kings Canyon technically were out of the park. That made a lot of people mad, but we had to convince them that if we didn't give in on those we weren't going to get a park. So they said, "All right, we'll give in," and it was all right. We got it. And now I think there's no longer any claim on it. The Bureau of Reclamation has now given it up. I think it's reverted to the park, perhaps subject to emergency use. But hydro power is so relatively expensive now that I don't think it will be used.

As far as water storage, they've got much greater areas. You understand that some areas can be turned into great dams but do not have much depth; therefore they do not have much fall of water and don't produce much power, but they can hold a gigantic amount of water. The San Luis dam is one of these huge storage reservoirs. People don't realize what it is--the water is pumped into it from the Sacramento. In fact, the water that flows into it is practically nothing--that's a very arid area. There's this huge lake, I don't know how many square miles; then, as they release the water, that water goes into the forebay, but it first goes through a power house, so it produces power at about half the cost of getting the water up there in the first place. It doesn't break even, but it does reduce the basic cost. From the great forebay, by computer, it is directed to the different aqueducts leading south to San Diego.

Teiser: Have there been any examples of made lakes being abandoned, let go back to nature?

Adams: Oh, I think a few small ones. Now there's a very ridiculous movement: Some people are saying we should take out the Hetch Hetchy project, take down the O'Shaughnessy dam and let the valley revert to nature. Well, it's the craziest thing I've ever heard of, because there's no other provision made for San Francisco to get that much water. The power situation there is highly illegal, to sell the power to the PG&E. The Raker Act does not permit it, but we've always done it. The alternate would be to have two separate power systems in San Francisco.

I don't think there's any major dam that has been abandoned that I know of. But there have been many small ones. They just become a "plateau." Unless they take the dam down. Which is quite a business. You see, the San Luis dam is an earth dam; so is the Oroville dam. An earth dam is just a great pile of rock and earth. Whereas Boulder Dam is a cement dam.

Adams: They had a terrible time with a dam in Italy. They had tested the rock as being a very firm type and built the dam on it, but they didn't know that the rock would gradually yield to the pressures. Finally it gave way and the water began to leak out, and once the water starts going, the dam goes down.

A dam is a very interesting thing in hydraulics. A very strange formula is involved. It's like an aquarium. You have an aquarium six by six feet, and you have to have a very thick piece of glass. Now, if you had that aquarium a mile long, but only six feet high, the same glass will still hold, because the water is subject to gravity. It isn't all pressures against the glass. So when they build these dams, the dam itself very seldom goes out; it's the contact between the dam and the earth that goes out. I forget the formula. I've never really known it; I've just seen it. It's pretty complicated. And after a certain distance in the length of the dam, it doesn't make any difference, because the weight is supported by gravity on the ground.

Teiser: You were mentioning the Hetch Hetchy--was the Sierra Club ever involved in Crystal Springs?

Adams: I don't think so. But we've always been interested in preventing unnecessary developments. Of course, there's a big dam there above Hillsborough in that canyon that people don't realize. The Crystal Springs lakes were relatively small when they were first discovered, and then they put in this dam which raised them a hundred feet, I think.

Teiser: It is always considered an earthquake hazard, isn't it?

Adams: Oh yes. If that dam goes, I've been told, it's going to be awfully bad for part of the Peninsula.

Teiser: The Sierra Club did play some part in the Point Reyes National Seashore.

Adams: A very important part. We made a very important effort in that and we had some unfortunate things happen. We did a very good book [Island in Time], and then later a movie was made of it. For some reason or other, Brower adapted the movie, edited and changed it, and created great animosity. He used this movie and didn't give credit. Poor editing; it's a very sad story. There was great animosity there when there shouldn't have been at all.

Teiser: Who made the movie originally?

Adams: I forget the name. It's quite good. But Dave wanted to take all the credit. Just a habit, you see, of acquiring as much credit as possible for everything that everybody did, which I think was a psychological attitude. It's just hard to understand.

Teiser: Do you feel that Brower underwent what's known as a personality change?

Adams: Yes, I think he definitely did. I think about three years after he took the position of executive director, during which time, as Leonard would say, he was simply marvelous, he suddenly was bitten with the power bug, I guess you would say, and really went through a very definite change, because some of the things are so illogical and so irrational that it's hard to conceive of them.

Teiser: He would not have been capable of doing them earlier?

Adams: I had a feeling he would. He had always given us the feeling of being most brilliant and clever and capable. But, it's a strange thing. It's like people that have fanatical religious convictions--logic doesn't exist. And unfortunately, history shows that many of the "movers and shakers," as Mabel Luhan called them, were extremely difficult, irrational, illogical people. But they were so convincing that a subsequent generation, or even their own, made something out of their convictions--made use of them in some way within themselves. The Calvinist doctrine itself is something that's pretty hard to understand.

Transferring Properties to Public Ownership

Teiser: Brower fought effectively, however, for Point Reyes?

Adams: Oh yes, he fought effectively for a great many things. And I want to make it clear again that his total effect has been tremendous. And for that I was very anxious to see him get the John Muir Award, which was a straightforward recognition of conservation. I didn't think he should be honorary vice-president of an organization that he nearly wrecked. I wouldn't accept that position myself because of him; I couldn't, in protest. I could understand the John Muir Award. As somebody said, the railroad association could give Mussolini the gold medal for making the Italian railroads run on time, but you'd hardly appoint him to the hall of fame as a great human being. [Laughter] Or as the savior of Italy. I don't think Mussolini would really deserve being an "honorary vice-president" of Italy. [Laughter]

But anyway, you come across those things in business. I think a very good example of destructive belligerence is George Meany in labor. He has the ability of practically irritating everybody, and I don't know what he's gaining. I'm just aghast.

Teiser: Has organized labor ever stepped up for conservation?

Adams: Yes. Walter Reuther was marvelous. He was one of our great losses. He was really a very understanding, balanced, very intelligent person and very sympathetic. He had big plans, but he was killed in that unfortunate accident. His union had a place in Michigan, and one of the men who was operating it--a high man in the Yosemite Company--would go there and assist him in their recreational studies. He was just on the edge of really making a great contribution.

Dr. Land thought he was one of the great important forces in the country. He went to his funeral in Chicago. He felt it was little enough to do. Then Land had another great loss with Whitney Young of the Urban League. They were trying to solve that South African problem and some people from Polaroid were in Africa. He apparently had a heart attack and drowned. That was a great shock, because all these people were interested in a better life for people, in the out-of-doors certainly.

You see, the out-of-doors to the easterners means something different than to us. It's not the wilderness mystique. We have to understand that--we have an awful problem now with the ghetto and the urban problems and the underprivileged and the rural attitudes--the rural people are really land-users and exploiters who enjoy hunting and fishing. But the elitist group which enjoys the so-called "wilderness mystique" is in a pretty precarious position. They're diminishing. They're growing in number but I think diminishing in proportion to the population. Every time the space program or the wilderness preservation or anything like that is proposed, you find a big bloc coming up and saying, "Well, why don't you spend these millions to improve the urban blight?" etc.--which is perfectly sympathetic. You see enough in San Francisco to realize how perfectly ridiculous it is to see these great skyscrapers--super slick, with imperial grandeur--and just a few blocks away there's rundown buildings and quite poor people.

I went into the Clift Hotel--a very nice place--and right after supper I walked down the street past shops of postcards, posters, books--real porno places. Horrible stuff, really. Just bad, not even funny. And full of people poring over this stuff. And out in the street a guy had passed out with drugs on the corner--his knapsack spilled in the gutter.

Teiser: You took the wrong turn. You got into the Tenderloin.

Adams: I was right on Geary Street! And then in the afternoon I was going down the same street and there was another man passed out on the sidewalk. People just standing around. Apparently no action. We see them right here in Carmel. This gorgeous glamor of the San Francisco scene; it is a wonderful glittery place. New York's got bigger buildings, but it really doesn't have the flare. But it's got the other side too!

Teiser: The Golden Gate headlands park--*

Adams: Well, that's very important, because--let's see, about 1950, I remember, I was very active in getting letters out, writing, thinking about Fort Point as the nucleus of a national monument. Somebody suggested that I carry it on and include the whole Golden Gate area. But I didn't really organize it properly. Then under Wayburn, in the middle 1950s, he and I worked very hard for the extension of the monument. Even before that, I remember Newton Drury and a few people, we thought about making a great state park, even taking over part of Sea Cliff, buying out the houses on the cliff, which wouldn't have been too much in 1950 (now it would be impossible) and taking in the whole coast from Point Lobos out near the Cliff House all the way down to Bakers Beach and Fort Point, and then all the way over from Fort Baker on the other side to the military lands around Point Bonita. And north to the Tennessee Cove. Well, that fizzled; nothing much happened.

Then Wayburn and I tried to get the national monument going, and then all of a sudden the real estate development was planned-- a huge highrise project called Marincella. Then it [the park] came to life again, and now a lot of people--Wayburn and others--have really done a great service in effectively expanding it. So now it goes from Point Lobos south through part of the Presidio, across the bridge, to a little east of the bridge on the Marin side, west to Point Bonita and quite a ways north. So where all that development was to be, is now included in this area. It's really very wonderful.

That's what usually happens. Something is proposed; it gets a big pat on the back, but it's not "realistic." Then it's finally approved, but there's no funds to implement it. Then in the meantime, the developers move in, and the property values raise, and when the time comes it may be too late. It's like the Point Reyes area. That was absolutely approved and established, but no money was appropriated! So these developers came in, and while it was a de facto establishment, it wasn't bought by the government, so they started developing. The instant you put a house up, the property value rises. There really should be a fundamental law which says that when an area's selected and approved to be a government area, the prices should then be frozen at that level until it's actually purchased. The big organization in the East that buys land is holding them for park purposes--they buy it by the acre. It might cost \$100,000 or \$1 million, but they hold it, and when the government takes it over, it pays that money plus the interest, which is 5 percent or something. But if the government just refuses to take it over, they can sell or develop it. They have to--they have to turn it over, because they can carry the burden for just so long a time. It's all very logical; makes a lot of sense. If I was a capitalist and had a lot of money, I could say, "Well, sure, I'll

*Created as the Golden Gate National Seashore.

Adams: put up \$250,000 to save this property and hold it." If I'm getting 5 percent a year, I'd earn a lot of money in total until it sold for that amount. Might do just as well as if I had it in stocks or bonds, but the prime inducement is there. Then of course, after a given time, if the government says, "We don't want it," then I'm free to sell it and do something else with it. It's certainly a very important attitude and one that has brought a great deal of very valuable land into public ownership.

A lot of people don't realize just exactly what this means. It can be done. Because it's stupid just to say, "I'll buy the land and hold it." You should get prior approval of agents if the state thinks they're interested because it is of state park or national park standards. The Audubon Society has done that; there's been some very good things done. But if the government just says, "All right, we're going to take this seashore. We approve it and we will establish it, and we will put a superintendent there in a little area, but we don't have any money to really acquire it," the whole thing can blow up.

Teiser: On the other hand, sometimes it's hard to get the government to accept some land that people want to give them, isn't it?

Adams: Well, there's problems there, you see. There has to be some reason for use. Now, there's perfectly beautiful things--look at this hill. Mr. McGraw and I would just love to protect this area here. But the county won't take it because there's no way to use it. It has to be tied in with something. Then it goes off the tax rolls, which is something that people don't like. (Putting it in a scenic easement might solve the problem.)*

Teiser: Then the county has to maintain it if it accepts it?

Adams: They have to maintain it. Oh, it's a very complicated thing.

There's a little property down here. We're trying to get Conservation Associates and other people interested in it. It's a beautiful old house, one of the earliest in the area, and the property goes down to the beach. But when you look at it, what use has it? It's like a little memorial that somebody wants to give, but such takes it off the tax rolls and it has no use. Now, it could be attached to Point Lobos, you see. You could have a green belt that went all the way to it. That would be something. But it is not valid as it is. You see, the state would say, "Yes, we'll maintain it if somebody will put up the funds."

*We did in 1976. A.A.

Adams: It's like our Old Capitol Club in Monterey which is a beautiful old adobe, Casa Amesti, which was given by Mrs. Frances Elkins to the federal government. She was a very great decorator, thirty, forty, fifty years ago. The National Trust accepted it, but there was no money to maintain it. The Old Capitol Club, which is a group of leading citizens, a lunch club, took it over. It is used for lunch, and they maintain it. It has to be open to the public one day a week. I think it's open more than that now, but then, who else has the funds to run it?

So to show you how this works--for a while the initiation fees were going to the National Trust and were tax deductible. The understanding was that that money would then go into the major repairs to the house when needed, like a new roof. Oh no, it just went into the general fund. So now we don't turn it over to the government any more. The \$700 or whatever the initiation fee is, goes into the savings account fund to take care of earthquake cracks, painting, and general repair. We come out about even, but we do maintain it. Now, if we didn't exist I don't know what they'd do. They'd have to raise money somehow to keep it, and believe me, keeping a place like that in security and keeping the garden up is a real task.

Teiser: I want to ask you a little more about the Wilderness Act of 1964. You were reasonably satisfied with it as it came out?

Adams: I think my reaction was that I was more satisfied than I ever believed possible. We had a terrific battle on it, and everybody pitched in. Now, the difficulty is in defining the wilderness boundaries; again, it's subject to many variances. The interesting thing is that the wilderness concept goes right across forest and national park lands. You think of national park as being dedicated to wilderness, but it really isn't. The wilderness sets certain rigid restrictions that stop many developments, you see.

You could, for instance, put a road up to the base of Mount Lyell; you could do all kinds of things which would be intrusions but might be justified from the park point of view. But if it's a wilderness area, once established, it takes an act of Congress to make any such changes. It's a very healthy thing. And we have what they call "enclaves" or existing service areas, such as the hikers' camps, which everybody agrees should be maintained. Well, they have become enclaves in a wilderness area. Like the Tioga Road in Tuolumne Meadows. I'm plugging very hard for two more High Sierra camps to make the system complete. And now that's caused a little battle. I say at least one at the top of Yosemite Falls would open up that whole area for hikers and wilderness use. And I don't see anything wrong with that, but the die-hards say, "No, we can't have that, we can't have anything now."

Adams: And there's one class of devotees who claim that when a tree goes across a trail you don't cut it, when a bridge goes out you don't replace it. Which means closing off the country completely, which to me is completely ridiculous because you don't have to go that far. But absolutely no new roads and no elaborate trails and no ski installations and no hotels should be built. When we were writing up the plan for Yosemite, we were trying to keep sensible-- Half Dome has a fixed cable up the east side so you can climb up by hand. That wouldn't be allowed in a wilderness area. The wilderness area should go to the top of Illilouette Ridge, but the ski people want to reduce it so they can ski down the east side. There's always a definition of the borders. You see how complicated it gets.

[End Tape 28, Side 1]

[Begin Tape 28, Side 2]

Adams: Well, so I think we have to bear in mind that the wilderness concept is really one of the great steps, and of course every one is being resisted and subject to hearings. However, we have to bear in mind that the democratic process really includes the concept of logical variance. If enough people go to a hearing, and if there's enough protest, then the protest is bound to have an effect, and there may be a variance to the basic ideal plan. And I think there's no other way we can do that unless we have a dictatorship, which would have repercussions in other directions.

You get awfully mad sometimes and you say, "Well, why in the world don't they just take these valleys like those in the North Cascades and put them in the park?" Well, timber industry and the Forest Service power is too great. We couldn't have the park unless we have full consideration of the variances. And sometimes they're absolutely anti-aesthetic. They're just recorded as percentages of areas on maps. And remember, a wart on the face of Venus really does a lot of harm to the whole face. It isn't a matter of area.
[Laughter]

Teiser: One of the things that you've mentioned is the position of the Sierra Club in relation to the Save-the-Redwoods League. Did Brower antagonize Newton Drury of the Save-the-Redwoods League?

Adams: Well, yes. But Newton Drury is a very big man, and the Redwoods League is composed of very big people, and they were very sorry that they had this very stupid opposition, which again was based on ego. And the Save-the-Redwoods League operated on a basis of raising money and buying redwoods. On a realistic basis, the redwoods are private property. As long as you live in this particular system, you just don't appropriate private property. The government can do it under eminent domain, but even then its value has to be proven and paid for. So the Save-the-Redwoods League started many, many

Adams: years ago. Colby was terribly important in it. They would raise money. They'd go to a lumber company and say, "Well, we want to buy Bull Creek Flat. How much?" That whole area was worth several million dollars. They go out and they get the money, a very considerable amount. It's called the Rockefeller Grove. Then they found that the redwood lumber people really yielded a little and said, "Well, if you're going to buy the whole thing--yes, we'll give some," because they were just suddenly realizing a good amount of capital. The redwood forest is not a reproducible capital. When they cut out a redwood forest, they plant other trees, you see, fast-growing trees, because it isn't economic to cut out a redwood forest and then plant redwoods and wait a hundred years. But the other trees are ready to harvest in twenty, twenty-five years. That's why the Monterey pine is the mainstay of the New Zealand lumber industry, because it's harvestable every twenty years, I think, for pulp and twenty-five to thirty years for timber.

The Save-the-Redwoods League really made the great, monumental contribution.

A Western Club or a National Club

Teiser: You mentioned Mr. Colby. In the 1950s and '60s, did he become somewhat out of patience or out of sympathy with the Sierra Club?

Adams: Well, yes. I think in about the sixties he felt that we had a particular job to do and we were diverting from it. And I used to say, "Well, I think the diversion to the chapters is a wonderful idea." He said, "Well, let other organizations do that." He said, "I think we ought to stick to our guns and be concerned with the Sierra Nevada and the western areas; we shouldn't concern ourselves about the Everglades, because we just can't spread ourselves." Now, I think he was wrong in the sense that what we have now is like a United States of America. We have all these chapters, and I would like to see them all send delegates to the "senate" and have the "senate" run the club. I think it'll have to come to that. The "senate" would appoint top people as executives.

In an organization the size of the Sierra Club, the president should be in the \$40,000-a-year class. We could have someone like Russell Train or--I don't know the new names that are coming up. But it really is a terribly complex thing because you have to be in constant contact with the pulse of Washington, and in theory we should move our headquarters to Washington. That was suggested, and that bothered Colby because he was conventionally a westerner. I think, in the objective sense, the Sierra Club should be based in

Adams: Washington, and let the chapters take care of the regions. Most of our environmental suits, which are many, are all over the country. So why should we be in San Francisco as a head office? We ought to be right in Washington along with the other groups and have a western regional office.

Otherwise, we just stay as a club, which suggests a group of privileged gentlemen who like to go on outings. Many of them had a lot of money and they could help in larger things, but I wouldn't want to go back to those days; that would be futile. The American Alpine Club, for instance, and the Appalachian Mountain Club. They very seldom do anything except just titillate their own members, have lovely banquets, outings, and birdwatchings. But they have little force in the national scene that I know of, unless they've suddenly changed lately.

Protecting and Administering Public Lands

Teiser: In the Everglades matter, I think the club, again, was quite active, wasn't it?

Adams: Very active. There again, a chapter was very effective--the Southeastern chapter. And I think Audubon helped in that. But the Everglades to me, and I hate to say this, seemed to be kind of a losing battle. It isn't the Everglades that are being affected, it's the surrounding area that feeds the Everglades. They'd have to make about one-third of Florida a national park to protect it.

You see what happened. Again, it's a terribly important thing. We got the Rockefeller Grove, and we have all these beautiful things in Northern California. Bull Creek Flat--a great place, but we never thought that the present logging tactics would clean off the land in the watershed all around. Tremendous logging went on. Then the first heavy rains appeared and there was fantastic erosion, and there was six to eight feet of water for the first time in history in the redwood rivers. So these great trees would topple, and it was a great loss. And that was due because of our inability to control the surrounding environment.

So if we had really known what was going to happen, we would have bought up everything all around, which of course wasn't all redwoods. It was all kinds of lumber. I guess spruce and chaparral. I don't know what else grows up there--I guess some pine. And they clear-cut the whole area, so the erosion was fantastic.

Adams: In the areas north of the Everglades they have taken water, and things are drying up. There are fires. It's awfully hard sometimes to define what is a national park. Yellowstone to me is a daisy chain of national monuments. And the whole Sierra should be a national park. It should be one great park--Tahoe, Yosemite, and Mount Ritter and all the way down to the Kern River, and call it Sierra National Park, with Yosemite Valley a part of it.

Now, there's no need to have two national parks in Hawaii, and they're talking about three. Why can't they have Hawaii National Park in three sections? But it's political, you see. The different islands these people live on have national parks. Hawaii National Park in itself is really marvelous. And Haleakala is the top of one great volcano. It could just as well be a national monument. But it could be part of the park as a section, which is all right.

Now they want a national park at Kauai, the northern island. And why have a whole separate national park, when it could be a part of the big Hawaii National Park? But the people there demand that, and the tourist industry wants as many national parks as they can get, because they think that attracts people. Just to have one national park, although it covers three great areas, is not as good as having three national parks, with all the attendant costs. A national park's a very complicated thing, with all the water rights and all the operational details. It's complex and expensive. So if I were a dictator, I would have Sierra National Park and include Sequoia, Kings, and Yosemite districts in one great area.

Teiser: Are there other big campaigns that the Sierra Club has waged that we haven't thought of?

Adams: Oh, we've had a lot--we've had Olympic Park, and of course Cascade National Park, and very satisfactory too. Now we're very happy to hear that we've partially stopped development in southeastern Alaska, probably saved that for a while. But the Forest Service did a terrible thing--they turned over 95 percent of the forest land for cutting, and a lot of that lumber is going direct to Japan. Southeastern Alaska's one of the most beautiful places in the world, and here it would just be cut off, and for a very low grade of timber. It isn't really good timber, you see. It's scrub--I think chiefly good for pulp.

The Alaska Pipeline

Adams: Now, of course, we're putting on the big fight on the pipeline, and that is something that I believe has to be very well thought about. The oil proponents say the Middle East is liable to blow up at any time, and South America can go communist (the Rockefellers are holding Venezuela together). If they deny us oil and say only the communist countries can have the oil, then we're cut off from very important supplies. So, they say, we'll have to take the north slope oil. Well, the north slope is very vulnerable, but it is still under our control. Now, how to get the oil down here? No matter how they do it, it's potential pollution. The best of all would be huge air tankers, because if they did crash, they'd burn in one area. Submarines and ships could pollute. So the club has fought the pipeline. And I think we forget that Alaska is huge, and the pipeline is small. We're accustomed to seeing a map with a line down it, which is probably actually two miles wide on the map, you see. So we could have pollution along the lines by breakage (they do have cutoff valves rather frequently). But if there were any international trouble or any sabotage, the whole pipeline could be demolished in one day with a few high-flying bombers, even low-flying machine-gun jets. And there would be a lot of pollution in that particular area.

But I don't think that would be as bad as the pollution of a big tanker grounding. You're really on the horns of a dilemma. They're trying to put it through Canada. Well, that still pollutes, and how do you know you're going to get the oil? Suppose you have a terrorist group--like at the Olympics, which was an awful thing. They could come in there when that pipeline is up; they could completely wreck it. Just hire a jet and drop a series of small bombs--blow up the pipeline in about twenty places. You'd have a terrible situation. You'd have pollution in a small restricted area, but you wouldn't get the oil. Whether the Sierra Club is the organization to get into this kind of thing is still a question for me. I don't know whether we're taking on more than we can possibly handle. In other words, there should be groups, anti-pollution groups that really should lead, and we could support them. But whether we should take the lead on that and on population control, I don't know. It seems like riding horses in all directions at once. Whether we'd ever get them back to the corral is-- [Laughter]

I'm not trying to be negative; I'm just trying to be realistic. The chapters are doing a wonderful job. They have local problems they spend all their energies on, and they do well. What can we do? We get a plea from a group, and that goes through a committee, and they say, "If you'll put that on the next meeting," and that's one of fifty items, and it probably won't get heard until the third day when everybody is in a state of collapse. So we pass a resolution saying,

Adams: "Yes, we agree." So then what? Then the local people say, "Well, the head office agrees." Fine. It's a year late. By that time, the whole thing's gone. It's like the Red River Valley in Kentucky and all kinds of problems such as the Indiana Dunes. I just don't know. The problems are just fantastic, and should really be passed on to younger and more knowledgeable people than I am.

"The Conscience of the Board"

Teiser: I think we quoted to you before that Dick Leonard said you were the "conscience" of the Sierra Club board. And you said, I believe, that you weren't sure what that meant.

Adams: I think Will Siri really said it. I really don't know what they mean, except that I was always standing up for matters of quasi-principle as against fact. They were talking about controlling hunters, and I said, "Why should there be any hunting today? It's a barbaric--I'd forgive anybody to go out and kill game to eat. But just to go out and destroy a resource--" And they all shook their heads and said, "Well, you're not realistic." So I was always more or less anathema.

Then I shocked them all by saying certain things that they feel is a deviation of their conscience, like favoring a tramway instead of a road. That to them is just a kind of shibboleth statement, you see. They don't realize that a road does a thousand times more damage than any tramway will do. So it becomes a matter of, I guess--the difference between free love and motherhood--[laughter] I don't quite make out the idea in some of their arguments. I was victimized myself in not supporting the cableway to Glacier Point. And then the first time I saw the road I realized I'd really made a profound mistake. The road did so much damage, and the cable railway could be little more than a power line.

Teiser: So it was that sort of thing that gave you the reputation of going your own way, at least?

Adams: Yes, yes. I went my own way. But that's a little exaggerated.

Teiser: Leonard said that your vote was a crucial one in the Kings Canyon road fight. And I think he said that was one of the things he'd told you in order to try to get you to stay on the board.

Adams: Well, that whole road business is very complicated, because when I first went on the board, the Lone Pine-Porterville road was a pet of the chambers of commerce and the highway department. It would be a very dangerous invasion of real beautiful wilderness country. The

Adams: alternative was the Minaret summit road. We made a gentleman's agreement with the highway department that if we supported a Minaret summit road, they would pull off support from the Porterville-Lone Pine road.

All of a sudden the club shifts: they're against all roads. So I said to Wayburn, "Look, how about all these people from Bakersfield and Fresno that are counting on this."

"Oh, let them go up the Sonora Pass."

Well, it's that kind of thinking! It's like what Brower said, "The country down here is getting too populated. Stop the people coming down to the Big Sur." I said, "Well, how are you going to do it?"

"Well, stop them. I don't care how you do it." [Laughter]

It's still the United States of America; you're still not going to put barricades on public roads, you see. This is the crazy thinking. It's so glamorous, and it excites a certain kind of emotional response. But you can't do these things, you see.

So I blew up on that. And then the Tioga Road was developed. If we'd had the trans-Sierra road at the Minaret summit, the Tioga Road would have not been developed to its present state. The damage in the Leevining Canyon--they just simply went in there and slashed. I still claim that if they had held to the original plan, it would really have put a handsome four-lane parkway right over the Minaret summit with no immediate access. It would have solved the highway problem. Nobody else would have had a leg to stand on.

Teiser: That is the one that you said would have cut the John Muir Trail.

Adams: Every time I fly across the Sierra, I'm cutting the John Muir Trail, believe me.

Tuolumne Meadows--two years ago, at my workshop, I was there from eight in the morning until six at night, and I counted thirty-two transcontinental flights going over the Sierra. I'd recognize some of the planes--DC8s, 747s, 707s--back and forth. Well, if you've got anything to do with the wilderness mystique, that's quite a blow, especially at night in the sleeping bag. I remember one time, many years ago, I spent the night--oh, toward the end of September, I guess it was, at Tuolumne Pass. I remember there were two of us--Mr. Holman and myself. We put the donkey down in the meadow below us. We were in the sleeping bags up there and the stars were wonderful--no satellites and no planes. And the silence was absolute. There wasn't a bug, there wasn't a mosquito--you know, there wasn't the



Courtesy of Sierra Club

Sierra Club Board of Directors - May 1963

Left to right, back row: George Marshall, 1959-1968; C.V. Heimbucher, 1959-1964; Ansel Adams, 1934-1971; Nathan Clark, 1955-1968; Will Siri, 1956-1974; Alex Hildebrand, 1948-1957 & 1963-1966; Lewis Clark, 1933-1969; Fred Eissler, 1963-1969. Left to right, front row: Randal Dickey, Jr., 1961-1964; Pauline Dyer, 1960-1967; Edgar Wayburn, 1957- ; Charlotte Mauk, 1943-1968; Dick Leonard, 1938-1973; Bestor Robinson, 1935-1966; Jules Eichorn, 1961-1967.

Adams: sound of water, there was no wind. And I'll never forget it--it's impressive (and sometimes depressive). Finally Mr. Holman said, "My God, it's quiet." I said, "Yes, it's getting me a little. Can you sing?" [Laughs]

Now you can't possibly have that situation. You have airplanes, and you have satellites. You lie out in the open and look up at the sky and hear planes and see things. Of course, you see them several hours after sunset, the lower altitude ones. But all the way to midnight, you see really high-altitude satellites. They're in the sunlight when they're passing. Then, when you're up [in a plane] at thirty-eight thousand feet and look down on the Sierra, it looks like God has stumbled on the rug. You have to look very carefully to see Mount Goddard and Muir Pass--the days of your youth when you spent a week just going over this much small area!

So the wilderness mystique is getting harder and harder to support and justify as far as the people are concerned. In a sense, it's a serious situation.

Well, don't let me ramble on too much. Keep to your questions.

Teiser: Back to the board of the Sierra Club--I don't know if this is an appropriate question to ask you or not, but can you assess what your chief contributions were over that very long number of years that you were on the board?

Adams: In the beginning, you see, the emphasis was much more on mountaineering, the outings, the Bulletin, and problems immediately relating to the parks. I think that I was probably effective with the photographs, and the pictures were used to very good advantage in the publications. I think the greatest contribution I might have made was the idea of the exhibit at LeConte Lodge. I said I had a friend, Nancy Newhall, who was awfully good at exhibits, and she said she'd help (she doesn't know we're talking about her). So we put together this exhibit called "This is the American Earth," and instead of two weeks for completion, it took six weeks. We had a terrible time getting \$1600 out of the club to do it.

Teiser: You took only six weeks putting that together?

Adams: The exhibit, yes. She was a fast worker, and the club was small--you see, the reason for that whole thing (this is very interesting) was that the government had a museum--a very good one--and they quite rightfully said that the LeConte Lodge (it is now known as the LeConte Memorial) was not serving any particular function. All we had was a few isinglass sheets with dried grass in them and a few books. They wanted to use it as a geological museum, which was very sensible. They could have had a valid geological museum--[Joseph] LeConte was a

Adams: great geologist. But I felt that the club should be represented in Yosemite as a conservation organization to the public. So I got hold of the directors (as a director, you see, I could do this) and I said, "For God's sake, let's try to do something to keep this lodge going as a 'front' for the club. We need an exhibit of our whole conservation approach."

So I got through \$1600 at a meeting and secured Nancy, and we did it. Well, then when this exhibit was up, it made quite an impact, and we made, I think, three more [duplicate exhibits] for overseas and the East. And then Brower said, "Well, why don't we make a book of it?" That started the whole book idea, because we took the theme and many of the pictures used, of course, and added quite a number--and put together This is the American Earth, which was a great definitive job.

So it's that contribution that I'd like to be remembered for on the board, as much as anything, because I don't think, if I had not been on the board, I'd have been as effective in doing it.

Teiser: Did you initiate some projects and ideas for the club to follow?

Adams: Yes, we had albums of pictures, we had much to do with developing the first wilderness conference. I had the Wildflower conference [Festival] in Yosemite.

You're a director, so they expect certain things of you. But I must say that an awful lot of the members, who were never directors or members of any committee, really did tremendous things, which is the way it should be.

The transition from a quasi-elitist, outing-mountaineering kind of literary organization into a front-line legal and political organization in the late sixties and seventies was a complete change of character. In fact, the name "club" is a very bad term. It was a club, but it's not a club now by any stretch of the imagination. I can't conceive of a club with a hundred and something thousand members.

Teiser: Mr. Leonard told us that you had wanted to resign from the board before you did, and he had urged you to stay on longer. Why did you resign?

Adams: Well, I felt I was absolutely ineffective in relation to what a board member of the organization should have been, as it was at that time. Before that time, we were confronted with simple things like outings and internal matters and the Bulletin, membership, how to get money for the Tappaan Lodge, and all kinds of little recommendations for this, that and the other thing. But when it came to the fact of

Adams: conducting lawsuits and trying to make decisions on nuclear plants and handling a multimillion-dollar budget, I just felt more and more out of it--not being expert on those things.

Teiser: Did you feel that the other members of the board were fairly expert?

Adams: Many were, but I think a lot of them weren't, but they should have been; a lot of people should have resigned and given place to other people that could really function. On the other hand, you can't resign and designate a particular person to take your place!

Then I was getting tired, I had my own creative work, which was piling up. And living down here in Carmel--to fly up to San Francisco and attend a "yak" meeting which accomplished practically nothing was tapping my energies. I felt I'd be of more value off the board than on. Besides, I couldn't stand the whole Brower administration, and Wayburn's weakness in controlling Brower, and the terrible impractical loss of prestige and cooperation with agencies. All that was very distasteful to me. I had many friends in these agencies. They'd look at me and they'd say, "What the hell's going on?" And I'd say, "Well, I wish I could tell you. We're taken over. We've got a poltergeist." [Laughter]

It's a very difficult thing to define, except that I knew that I had no right to be on the board, especially with capable young people coming up with the whole new philosophy.

I'm sorry to say that the present board doesn't please me at all. They're a bunch of political activists working for internal glory. They spent hours arguing out who's going to be president, fighting for the top power. What's the sense of it? I consider that thing being reasonable in high finance, but in the club you're supposed to be there to support certain ideals, and why should you have to fight to be president? Factions arise, and some people want Brower back.

I remember a long time ago when Joe [Joseph N.] LeConte left. He got fed up many years earlier. He knew the club was developing beyond...."I don't care what they do. I't s a new world for them. I want to spend my declining years doing what I have to do." Well, he was quite brutal and frank about it, and there's a little bit of that in me too. I have my books and exhibits. Seeing that I've spent all of my time in the last two years just working with prints and things, I don't know how I could have possibly had time to do anything but give the most "hummingbird wing touch." [Laughter] And just sitting there and saying, "Yes" and looking wise with a beard-- [Laughter]

A Publications Program

Teiser: What do you think the club now, in its present state--what its publications program should be?

Adams: I've got very definite ideas on that. The old Sierra Club Bulletin, as edited by Francis Farquhar, was a very distinguished journal. It could be related to the bulletin of the American Academy of Arts and Sciences. It was a very worthwhile thing. It contained beautiful articles in general, notes, and carried out a good tradition. It also did not have what we call "popular appeal." Again, it was an elitist publication. Now, the club puts out a magazine--bulletin--and it's finally got advertisements in it, which pay for a good part of the cost. I think that the club should put out a handsome magazine like the Audubon, which is filled with advertisements--of course, always related to the subject; should not advertise [just] anything. There's all kinds of things, books and boots and equipment, things that are appropriate. And it should have the best color reproduction, good writers--I think we could do it.

But I think the chapters should also put out good publications which would relate to the local scene of the chapter, which would be a little coffee table thing. Things that are standard 8 1/2 by 11, with fine cover, something that one would leave out with pride, and encourage new members.

Teiser: Are the chapters big enough to finance that kind of publishing?

Adams: Well, many of them are. The point is they don't realize their power. The Ventana puts out a mimeographed thing all full of newsy news, about what members are doing and trips they're taking and splurges on big and little things.*

So the club itself, I think, should subsidize the chapters to at least do a beautiful cover. And then these things can be sold--if they're good enough--and they might pay for themselves or more. Plus the fact that they give a certain prestige and could bring in more members.

We're losing members now. We're on the decline. I think it's because there's so many things going on. People have only so much money. After all, the members of the Sierra Club, as they exist now, are in a very median economic class, and a lot of them spend more money than they should.

*Now, 1977, vastly improved in style. A.A.

Teiser: Do you think the Sierra Club should put out practical handbooks for hiking?

Adams: Oh, fine publications--marvelous. Those are the things which really will pay. And then getting our big books, which never went into many more than ten, twenty, thirty thousand copies--get them into paperback up into million-copy editions. When the American Earth came out in paperback, it had an exponential increase in its impact. You see, when you get a book for \$6, instead of \$15 or \$20, \$25, you just reach a totally different and expanded audience. All these young people today are really dedicated and working terribly hard to accomplish something. But they can't afford \$25 books. I can't afford \$25 books. I've got a limit. I should have all of the Sierra Club books, but I simply can't afford it. A third of them are, I think, rather unnecessary. It's an awfully complex proposition.

Of course, we went into the situation of being a publishing house without experience, and the publishing of the books is what really wrecked us in the financial sense.

Teiser: Would Brower have had enough experience in publications to handle it correctly if he hadn't had other things to do?

Adams: No. I think we should have immediately allied ourselves with a top publisher. We should have provided the book--contents, illustrations, design, etc.--and have had it published and priced so that the club and the author would get a royalty. Suppose we got 20 percent net of sales, and the author got half of that, and the club got half of that--we'd have been sitting pretty. We would have had more books out, we would have had more impact, and more cash in the reserves!

We lost about--it's safe to say--a dollar on every exhibit format book we published.

The little books like On the Loose, guides and climbing booklets, they've done wonderfully well. Then when we released the books to the publishers, like Ballantine for paperbacks, they just did wonderfully too. We get, I believe, 6 percent--the author gets 3 percent and the club gets 3 percent.

But Dave was saying that all authors should turn their royalties back to the club!

Teiser: What for?

Adams: For the benefit of the cause. But unfortunately the authors and photographers have to make a living too. It's an interesting thing that the paper people get their money on about a fifteen-day credit, and the printer gets paid on a thirty-day limit and so on. The author should get his, too!

[End Tape 28, Side 2]

[Begin Tape 29, Side 1]

Adams: I don't like to just sit here and castigate Brower, who I think is very difficult, gifted, and somebody that I wouldn't want to touch with a ten-foot pole now as far as ethics are concerned. But while he did a great deal, he practically wrecked the club. One of the reasons Colby left the club was because he recognized that Dave was going to wreck the club. He warned every one of us that you can't continue his tactics, you can't continue his internal level of management. You can't say that you're above the board of directors.

I understand the Friends of the Earth are a quarter of a million in debt. In the meantime, the good old Save-the-Redwoods League is perfectly solid and continues to get its thousands, hundreds of thousands, and acquires redwoods, runs its office, and everybody's happy and on a first-name basis.

The Future of the Sierra Club

Adams: The whole thing [the Sierra Club] is just so big now that it's going to take a tremendous volunteer effort of hundreds or thousands of people and all the chapters getting together. I don't think we have anybody now on the board who's big enough to really put it over. If Dick Leonard was a younger man, he could do it. I'm not trained to do it. But I really think the future of the club is in a very precarious state. We could blow up at any point. And now we're losing members. The pendulum's bound to swing. The membership is based on member services and member excitement. And believe me, a lot of young people are not going to be satisfied to just read legal briefs about "friends of the court"--amicus curiae--on some obscure power line business in Tennessee and so on. This is sort of going out of the sphere of public excitement.

We did have, when all the books were coming out with all the flamboyance and publicity, we did have great excitement. I know that if I even ventured logical thought about it, I had great hostility: "Oh, you're dead. You don't know what you're talking about. You're an old fogey. You're not out there fighting."

Well, now the fighting doesn't exist any more as such. It's down to hard-boiled, nitty-gritty legal considerations.

Teiser: There was a certain excitement in the old Sierra Club Bulletin when it told about new climbs that daring people made.

Adams: It was perfectly wonderful, but again it was an experienced outfit, not a theoretical one. When I use the word "elitist," I'm not meaning high society or wealth, I'm meaning a certain number of people

Adams: who have very high-minded dedication, which has nothing to do with whether they've got one dollar or a million dollars. Walter Starr was one of those people, Bob Price of Reno--a big lawyer up there--and Judge Clair Tappaan. I can think of any number of people who were dedicated, and it had nothing to do with the amount of money they had. If you had a lot of money, you gave money, and if you had a lot of energy, you gave energy. But you gave it on a basis that was very self-abnegating--is that the word to use? It wasn't ever for your own advancement. That's one of the things about our place in Yosemite--we confounded the National Park Service. We were always thinking of the park first, where the other concessioners were thinking of their pocketbook. We knew perfectly well that if we'd got to thinking about our pocket books, that would be the quickest way to lose prestige and money.

It's a very interesting life. I wouldn't have missed it for the world, but I'm glad I'm out of it because, as I say, I'm not entirely functional in many ways. In fact, I'm, say, "minus-functional" because the demands on a director today are so complex and so knowledgeable in certain areas, that the board of directors should be composed of highly trained people; the others are simple decoration.

Teiser: You suggested that a president be elected by a senate of the--

Adams: Well, I think the fact is that the club is so big, and the obligations so great that we cannot possibly count on volunteer services to be effective. Now, we have volunteers; everybody's a volunteer except Mike [J. Michael] McCloskey, who's completely snowed under. He's the executive director, and he's got so many problems! He's got people helping him, but it's not enough. I think that, well, to put it very bluntly, the club should be run by the chapters, which means the membership. Each chapter should send two delegates. They should be paid delegates--I mean, expenses and per diem. [They don't have to be salaried people, although some chapters are big enough to have salaried directors.] They should then direct the club and should appoint the very best people in the world to be president, treasurer, and secretary, and maybe vice-president. And pay them a full handsome salary, because when you have a hundred and something thousand people a year, you're getting an income of about a couple of million dollars. These people should be experts in their field. Policies should be laid down by the senate and carried out by the trained high-power executives. The chapters should be given an autonomous position by which they support their local problems.

And the local problems are now, believe me, about twenty for every chapter going, at least. But to have to refer all of these local problems back to a central volunteer board is absolutely ridiculous, because we don't have that human energy available.

- Teiser: I think you have members at large now who are not chapter members, do you?
- Adams: Oh, there's a few.
- Teiser: Not very many?
- Adams: No, very few. You automatically belong to a chapter. If I live here, I'm in the Ventana chapter. If I don't want to be, I have to say, "No, I don't want to be a member of the chapter." But I think that means practically nothing. It would be silly because what would you do? You just pay dues, make contributions, but have no direct contact.
- Teiser: There would be no board of directors as such under your plan, just these delegates?
- Adams: Well, there would be the senate, then there would be the elected executives, then the president would appoint an advisory board. You see, that would be his business. Like the President of the United States appoints a cabinet--
- Nancy
- Newhall: [Bringing photograph] I wanted them to see an early Ansel Adams.
- Teiser: That's a lovely picture. [Interruption]
- Adams: Well, have you another question?
- Teiser: I think you were saying that the president--
- Adams: To recapitulate: you have the chapters, which would really be membership representation, and they're little organizations on their own. They have their boards and so on. And they would send delegates to the main club, and the delegates would comprise the senate, who would then elect or appoint or hire, which is a more practical term, the top executives, which would be the president, especially treasurer, and probably a secretary. Now, just what that group would consist of would be up to the senate. But the president then would have the obligation to appoint an advisory board, like a cabinet--a top expert in nuclear power, a top expert in land use, a top expert in forestry and law and so on.

And we would have this big resource of the best people we could get, and run the club on that basis. And I think that is going to be the salvation of the club. Because for many years it has functioned very poorly as a volunteer organization at the level of the directorate, because there was just too much to do for a few human beings to handle it.

Adams: Now, the committees and the chapters and the library committee and the mountaineering committee and the Clair Tappaan Lodge committee--those are volunteers, and they work well at that level. But when it comes to the really big problems of the club, it cannot be volunteer because the president of the club is a judge of the Superior Court of California at Vallejo. He has his whole career and life to operate. How can he be president of the Sierra Club and carry these additional burdens?

Will Siri is a very important man in the Donner Laboratory, a radiation laboratory division. How can he possibly do both jobs? Dick Leonard, who's an independent lawyer, spends at least one-third of his time with the club. Colby spent at least a third to a half of his life with the Sierra Club and still was the top mining lawyer in the world. And also ran the state parks. So in some way he spent one-third at least in conservation.

Then comes along a person like Lewis Clark, who's an engineer for the Telephone Company, who has to put in eight hours a day. He'd put in another four or five for the club for many years. Even that now isn't enough, you see.

And the treasurer of the club is at this time also the treasurer of Duke University. He spends thousands of dollars of club money a year flying back and forth to meetings. But how is he going to give the required amount of time, no matter how good he is, and do a good job at Duke or for the club? We need an absolutely full-time top executive treasurer at at least \$30,000 a year. That's the only approach that's going to save the club. Because we're not the little old elitist group that used to go out and go on outings, climb mountains, write good literary treatises and notices for little rock climbs. It's a totally different thing now. And terribly important.

Teiser: The early treasurer's reports were very simple indeed.

Adams: Well, a very peculiar thing has happened. We have a treasurer; he's supposed to establish policy. Then we have a budget. Then the finance committee, and the board of directors--everybody--approves the budget, and then it is up to the comptroller to see that it's handled. Well now, for some reason or other, the comptroller is not able to control the funds, because somebody from up above said, "Oh, we'll take a thousand from here, and so on." Well, the comptroller, not being too forceful, has been kicked upstairs to treasurer's assistant or somebody. But I just think of the comptroller of the Polaroid Corporation, which is a multimillion-dollar business--you can't go one cent over your budget without being called on it. That's his job. The comptroller is somebody who plain and simple controls the budget. It is what we need in the Sierra Club.

Adams: But Brower would say, "Oh, pay it" and would take it out of another account. He was down here one day, and Virginia got so mad at him-- I've never seen her so mad. She said, "Well, how much is it going to cost?"

"Well, about \$2500."

"How much have you got in the account?"

"Got about \$500." I said, "I guess we'll have to have a meeting of the committee." "Oh no," said Brower, "I can shift it." And Virginia says, "You can't shift it. What do you mean, shift it?" I said, "Dave, I think we really should have a meeting on this."

"Oh, we don't need one," etc. Those are the kind of things that really led to financial disaster.

Teiser: How could he do it?

Adams: He just did it, and nobody called him on it, you see. This is the exasperating thing. For a whole year Wayburn would not, because he was afraid the membership would rise up in wrath and throw out the board of directors. I used to say, "Well, Ed, if the membership is going to do that, then we should be thrown out. Suppose we are thrown out; we've at least done our duty. We have to stop this thing." "No, they'll just throw us right out and wreck the whole basis of the club."

So I've had all I want of that kind of stuff. But I think that as I live more, I find that we're not the only organization that has suffered by this, and a lot of great big business organizations have also had their troubles.

Now let's make a resume. In the sense that when I first knew the club, it was a small group of people, very dedicated. I call them elitist in the full sense of the term. And we were doing a lot of good by the force of our personalities and importance in the community. Many members of the club were really very important people--judges and senators. We had a big influence on the Forest Service and the Park Service and the state, and they respected our influence, and while they had no obligation to follow what we thought should be done, in many, many cases they did. And it was all at a very high level of integrity. We had a low political profile and high integrity profile. And then as we got bigger, well, we found that we were getting political pressure, without consideration for the people that really could have done something. Then in the sixties, it suddenly blossomed out into an activist, belligerent organization, which lost contact with the people we should be very close to, at least in discussion. Then we became really belligerent.

Adams: I guess we did save something. I'm always thinking about the things we could have saved if we had applied a different approach. And that's my feeling about it now: God bless it and God help it.

[End Tape 29, Side 1]

Recent Exhibits

[Interview XXV -- 19 May 1974]

[Begin Tape 30, Side 1]

Teiser: You've had two large exhibits since our last interview, first at the San Francisco Museum of Art, opening in October 1972.

Adams: Well, I felt very good about the San Francisco exhibit. The little catalogue that came out with it was very distinguished and seemed to attract a lot of attention. Of course, I'm always a very great problem to the critics because I bewilder them a little bit, being interested in nature, and it's very hard for them to translate between subject emphasis and expressive emphasis. But the public seemed to respond, and the entire exhibit was purchased by donation of three anonymous individuals.

Teiser: For the museum?

Adams: For the museum. With the exception of the original Polaroids, and Portfolio Five, which was not in my personal collection. That exhibit was very handsomely framed and crated and is being circulated by the USIA (I believe you can call it that; it's some cultural division of the Information Service) through Central and South America, and then on to Europe. And in a couple of years it will return to San Francisco as a permanent acquisition.

The Metropolitan show took quite a time to work out.

Teiser: That was very large, wasn't it?

Adams: Well, no. The biggest show I had was over 530-odd items in 1963, at the de Young Museum. That was by far the best exhibit, because the galleries were more intimate and the show was designed by Nancy Newhall around these nine galleries, and it was a very stunning setup. It never looked as well in other areas.

Teiser: The San Francisco Museum's exhibit was pretty well displayed, wasn't it, this last one?

Adams: Fairly well. The trouble with museums--well, let me get to that in a minute--I want to finish something on the big show in 1963 that I

Adams: mentioned, the big one at the de Young. It had too many, five hundred and something units, and that is far too much. It was circulated, but then it was broken into two parts, and then each part was broken into two parts again, and some of it's still going around the country, one-eighth or one-tenth the original show. The rest of it has either come back here or scattered. The big prints are at the Amon Carter Museum at Fort Worth, and now some of them are at the World's Fair in Spokane.

The [recent] San Francisco exhibit was just about the right size, but the Metropolitan exhibit [spring 1974] posed a problem. They wanted to show the big prints as well as a portfolio in what they call the Blumenthal Patio. It's quite a huge space, which is a reconstruction of a medieval patio, which is stone, and there were five big pylons, painted grey, on which these big forty-by-fifty (or more)-inch prints were mounted, all framed, and were lit by what they called "semidiffuse" spots from the ceiling. Well, they were overlit, but got light on them, at least, and that was a relief.

In the balcony, around the patio, were the portfolio prints. They were fairly well illuminated, some better than others. There were thirty-something prints there. Then in what they call the prints and drawing gallery was the main part of the show, which consisted of 16 by 20s and 11 by 14s--all the prints in the 16-20 category and smaller. In the center of this room were three cases which contained the forty original Polaroid prints. They were very well protected, each print in a frame, and the whole thing covered with another frame. It was quite a diverse show, but the trouble is there that the lighting isn't adequate. I mentioned, I think, in other parts of this interview, the problem of illumination theory. The total reflected light in the environment has a great deal to do with the impression of the prints.

Now, prints and drawings, etchings, lithographs, sketches, and so on, really look best in a rather low light level. It seems to enrich the value. A photograph, as it has a reflective scale of about one to ninety to over one to one hundred, is very critical in that respect. If you have a high-key environment, that is, a total environment more than 20 or 30 percent reflectance, the prints look dark.

Well, they helped just a little by putting the prints on a grey panel against a white wall. But the light ceiling and the general environment was such that the prints looked just about one step lower in value than they should have. Also, the necessity of having plexi-glass creates reflection which makes it a little hard to clearly see many of the images. But that's typical of all museums.

Teiser: Plexi-glass? In front of the prints?

Adams: It's in the frames, with a cutout over-mat over the prints.

Teiser: Why?

Adams: Well, the prints could be destroyed, vandalized, scratched.

Teiser: For protection.

Adams: Right, it's essential. The big prints are shown in a different way; they're covered with a very heavy varnish, which can be wiped off.

Teiser: But they're not covered with plexi-glass.

Adams: No, they're too big. The Polaroids are covered with plexi-glass, and then a second plexi-glass cover over those. Plexi-glass is marvelous in that it's clearer than glass, but it does scratch. But that doesn't hurt the print, except for appearance.

So the whole problem is just one of getting the right amount of light, and the museums are built with circuitry that'll take just so many amps, so many watts of current. They load it up just as far as they can go. They practically doubled the illumination on the walls, but even then it wasn't enough. Except at the ends of the gallery, where the lights were closer, therefore more intense. But it was rather an effective show, and many people came and Dave McAlpin gave a banquet afterwards for about twenty-eight people. It was a very festive occasion.

That show is all beautifully framed and cased and will go on tour. The plans now are it's going to Indianapolis, then it's going to Washington at the Corcoran Gallery, and then it's going to the Victoria and Albert Museum in London (maybe a couple of places in this country before it goes to England). So I'm satisfied with that.

There are some funds that McAlpin put up to put this show on. And anything that's left over the costs of the show will be used for acquisitions. So maybe somebody will come up and buy the whole thing!

Teiser: Did you choose the prints?

Adams: Yes. Of course, in a case like this, you choose many more prints than you use. You line up prints that you think will work, and then you give them a choice.

Teiser: Were you there at the time of the installation?

Adams: No, that's one thing we try to do is to keep away from the curators! We think those people are experts and it drives them completely batty to have the artist coming around dictating the hanging. The artist takes his chance, but that's their field.

When Paul Strand put up his show at the museum he drove them all nuts by shifting everything around. They tried to arrange things in sequence, but he didn't like that. It just drove them crazy, so I swore that I'd have nothing to do with the hanging.

Teiser: You didn't have anything to do with hanging the last San Francisco show either?

Adams: No. We may put together a few categories just as suggestions in San Francisco. We had the photographs divided into a Yosemite gallery and a Southwest gallery and a San Francisco gallery. That was their decision. As we supplied them more prints than they used, that gave them a certain flexibility.

So now the next step is going to Arles in July, and I can stay only a short time because the [new] book will not be fully printed by the time we leave on July 11. My contract reads that I have to stay around the press room when the book is being printed.

Teiser: Which book is this?

Adams: The New York Graphic Society book, the big one.

Teiser: What's the title of that to be?

Adams: It's just Ansel Adams, Images 1923-1974.

Virginia and Mike and Jeannie [Dr. Michael Adams and his wife] and one of the grandchildren are going to Europe with me, and they'll stay over several weeks.

Teiser: What is the event?

Adams: It's a festival of the arts, and they have photographic workshops and exhibits.

Teiser: I see. Are you going to participate in a workshop?

Adams: I'm participating in some kind of a workshop with translators--I speak no French. I better speak English! [Laughter] I don't look forward to it with much pleasure; it's going to be hotter than hell. Oh yes, everybody tells me that it's just like Fresno. [Laughter] It's a very hot place. They'll say it isn't, it may not be at night, but it's very hot in the daytime. It's inland--

Polaroid Prints

Teiser: Let me ask you a question that just came to mind while we were talking. Your Polaroid prints, of course each one is unique, but do you have record copies?

Adams: Yes, there are a lot of copies. There are copies now in reproductions in a little book called The Singular Image, which is just the Polaroid prints that are in the New York show. They really belong to the Polaroid Corporation.

Teiser: I see. But somewhere there are some kind of records of them, so that if one were destroyed, you'd have a--

Adams: Yes, but it's pretty hard to get a good thing. It's very hard to make copies because the Polaroids have what is called a linear tonal scale. No other photographic material has such a linear scale. What you see in the image is practically a "straight line," a proportionate increase in tonal values the mind recognizes and responds to.

Teiser: Do you ever do these on p/n material?

Adams: Oh yes; I have about fourteen 55 p/n enlargements in the exhibit. But most are original Type 52 prints, long before there was 55 p/n.

Teiser: Is that a field for research, making adequate copies or duplicates?

Adams: Yes, I think it is. I think there are two big things to work on. One is to make adequate copy negatives of fine prints, so that you would be able to duplicate them in as true scale as possible, and the other problem would be to prepare a treatise on what the lighting of objects of art should be; different mediums require different levels of lighting.

Lighting Pictures

Adams: But a very interesting thing. Mrs. Carlson had a modern French painting with a rather somber, rich feeling, in a room in her apartment in Carmel. Her new apartment at Pacific Grove is about three times as bright, and the picture seems quite different in effect. But still, it looks good (only different) in either condition. This light here in our gallery is very beautiful for photographs now. But I had to drop the flood lights by over four feet to bring it up to the required value. I should have installed a light rail, but that would have been very expensive.

Teiser: But the skylights and--

Adams: That was all worked out together.

Teiser: How high is the ceiling?

Adams: Sixteen and a half feet.

Teiser: And the lights are now at about what angle to the photographs?

Adams: A fairly acute angle to avoid reflection and about five-six feet from the prints. The room in San Francisco was nineteen feet high and twenty-three feet wide. This is sixteen feet high and wide; everybody thinks this is bigger than the San Francisco room. It is bigger in square footage but less in height than the San Francisco room.

Plans

Teiser: And what next?

Adams: Going to have a big lecture and reception at the Corcoran Gallery, and then I have to go to England in 1976 and give three lectures for the Royal Photographic Society, because I got into an awful mix-up with them by promising them a show and then had to have it at the Victoria and Albert Museum because of the Metropolitan Museum's plans. We had to go through some big maneuverings with the Royal Photographic Society to get out of this conflict. And they agreed, provided I come over and give the three lectures.

Teiser: When will that be?

Adams: Seventy-six some time.

Then the new plan is that the prices for my photographs go up. They all go up to \$500 on September 1. If you order before that time, they'll be at the present price. The result is that galleries will send in enough orders to keep me busy for an awful long time.

Then, on January 1, 1976, I don't take any more orders. I'm finished printing "to order." I can make sets of work which will have institutional acquisition. We already have some leads. From anywhere from \$25 to \$100,000, depending on the size of the sets they may take.

Some of the negatives that I haven't printed, if I don't print those things before I go to the happy hypo baths, it will be terrible. So I must get busy and print! [Laughter]

- Adams: I have a lot ahead. Then I have Portfolio Seven coming out next year.
- Teiser: Has all this high degree of organization come about through Turnage?
- Adams: Oh yes, he's done a wonderful job.
- Teiser: Has he made out this time schedule?
- Adams: Yes, he's made out all the schedules, raised all the prices, and made the business arrangements. The Turnages really made the Yosemite gallery work out beautifully.
- Teiser: But your print time schedule, and prices and so forth--since he's worked that out, you don't have to bother with them in the future.
- Adams: I just have to do the work.
- Teiser: That leaves you free for the creative work.
- Adams: Presumably--more than now, at least.

[End Tape 30, Side 1]

Art Festival at Arles

[Interview XXVI -- 23 February 1975]
[Begin Tape 31, Side 1]

- Teiser: Last time we talked was before you went to France last year.
- Adams: Yes, that's right.
- Teiser: So would you begin with your exhibit in Arles?
- Adams: The trip was really short, and it is very foolish of me to try to give any description of France with such a very short and hectic stay. It seemed that the government had arranged for the exhibit to be placed in one of the Arles museums while I was there. It was quite handsomely hung and opened on Bastille Day, and great fireworks were going on the other side of the river, so it was quite a celebration. [Interruption]

So I came in at the tail end of the French group with a little interim of a few days, and then started at the beginning of the American group.

Teiser: Was it a conference on photography and the arts?

Adams: It was called the "Art Festival at Arles" and it presented all media. There were marvelous tapestries, and there was music and opera and ballet. I didn't attend any of these things but the tapestries--I preferred the extraordinarily good cooking! Some of the events were held in the great ruined abbey, just east of the town, and then I was driven on to Les Baux, saw that pretty thoroughly and had dinner at a very elaborate and famous restaurant near there.

Then the day I left I flew to Paris from Marseille in the morning, made a pilgrimage to the Louvre in the afternoon.

Teiser: Before you leave Arles--you were there with a number of French photographers. Did you all discuss photography together?

Adams: Oh yes. Also the Whites from Stanford who actually ran the American workshop. They were in charge of that particular phase of photography. We had a few field trips, lectures, discussions of photographs--others' prints as well as a discussion of my prints as were exhibited in the museum.

Teiser: Did any clear divisions come out between the American attitudes toward photography and the French attitudes toward photography?

Adams: Yes, there was always a great difference between the European approach and the American approach, because most of the Europeans have little or no interest in what we call "print quality." That lack of interest in print quality, of course, is I think probably the dominant difference. The European is interested in--I call it "observation." Very few people in France buy prints as such. They mostly are concerned with events, observation, journalism, and so on.

Teiser: I think the French photographers there were Lartigue--

Adams: There was [Jacques Henri] Lartigue and Brassai. My sponsor was Lucien Clergue. Then there were many that I can't remember the names of. But those were the prominent influence--Brassai, Lartigue, and Clergue.

Teiser: Wasn't Cartier-Bresson there?

Adams: Cartier-Bresson came down for a lunch. But he's a very peculiar man; wished to be totally incognito, but somebody recognized him. It upset him greatly to be recognized, so he disappeared very quickly. But he contributed nothing to the festival that I know of.

Teiser: The gentleman with the-- [looking at photograph]

- Adams: That's Brassai. The gentleman with the white hair and very noble face to my left there is Lartigue. Lucien Clergue did not show in these pictures.
- Teiser: You have a wonderful portrait of Brassai.
- Adams: Yes, and I also have a beautiful portrait of Lartigue, which I did at Arles. In fact, the only decent picture I made. I find it very difficult to photograph, both because of the light and the peculiar feeling that everything had been done and was old and had many, many centuries of restorations. I just could not get very excited. I suppose I would have to go back there and live quite a long time. I can understand more now the French approach to people, events, situations--
- Teiser: But you don't like it much?
- Adams: No, I was very glad to get home. I have to admit, even Los Angeles looked good to me. [Laughter]
- Teiser: After Paris?
- Adams: I was terribly disappointed in Paris--the highrises. Another thing that bothered me was the untidiness of the landscape; people littered. I think the outstanding events of the trip were meeting some of these wonderful people; the ride on the Mistral (the train from Paris south); the incredible food; and the gorgeous view of the east coast of Greenland on the way home. [Laughter] That alone was worth the trip.

Images, 1923-1974

- Teiser: Then I guess the next big event was the publication of the New York Graphic Society book.
- Adams: Then I came back from Europe in time to continue supervision of the pages.
- Teiser: Tell a little about the production of that book which involved you so heavily for so long.
- Adams: Well, it was designed by Adrian Wilson. He and I and others went through hundreds of pictures and chose the ones that would "flow" properly. Of course there's always many left out that I regret but can't help, as there's a limit. There are a few in the book that I would like to have placed differently now that I see it actually finished. Wallace Stegner did a great job with the text, and you know George Waters did the printing.

Adams: Adrian's job, of course, was not only the layout and design of the book, but also the production of the mechanicals. That means the drawings of the pages where every image is accurately scaled and then bound together so there's no error in page number. It is the general dummy production of the book.

Then George Waters made the reproductions to Adrian's specifications. There's a new system of proofing, what they call the "two-pass litho"--two separate plates that can be proofed together. You really see in these wonderful new proofs just about what the final plate's going to hold. But of course that doesn't control the inking.

In any event, many of the plates had to be made over several times, and it was all mutually agreed that I would supervise that and they would be made to my specifications. No matter how good the craftsmen are, it's very difficult for them to anticipate just what the artist would like in terms of relative values and so on.

When the mechanicals are made and the original proofs are finished, the engraving negatives are made (long-range and short-range negatives), and they are mounted on the big sheets by what is known as "the stripper;" he's a special craftsman. He mounts these up with great accuracy and inserts the type lines.

Then his make-up is photographed on aluminum plates, which of course are chemically treated and then developed on the basis of an aquaphobic and aquaphilic process, which means the areas that reject water and the areas that love water. The aquaphilic relates to the spaces between the dots that do not accept ink, and the aquaphobic are just the dots, with no actual raised type in the litho process. The aquaphobic are the spaces that accept the ink and transfer it from the roller to the blanket and then from the blanket to the paper.

How's that?

Teiser: Fine. [Interruption]

Let me ask you, how did the book start? Did they come to you and ask you for it?

Adams: No, an agent in San Francisco decided it was about time that there was a big definitive book of my work done. So I said, "That's great." He said, "I'll act as your agent and try to place it." And he almost placed it with several big publishing houses. They finally backed off because they were afraid of the costs, which were pretty terrific.

Adams: Then he got to the New York Graphic Society, and they were quite crazy about it, but they also said, well, they were in a precarious position. They changed managers, so there was one man who had it just about going and then another man came in and held off.

So finally another man moved in as managing editor and director, and Bill Turnage saw him and arranged for the book. He convinced him of the merit of doing it and also pressed the deluxe edition concept, which of course raised the value of the book rather severely.

Then they full-speeded it ahead. I said I'd like to supervise the printing, so George Waters being in San Francisco was the logical printer, and we worked with Adrian Wilson. Adrian Wilson wasn't too well, increasingly debilitated--his heart pacer was not acting right. (He's all right now.)

At any event, there were some delays. The problem involved in that is that once the plates are made, and you've accepted the proofs, you still might find defective images in proofs from the press. So sometimes you have to go all the way back and make another plate and go through the whole process. It is a pretty costly business. And of course George anticipated all that.

These plates were printed on the Miehle two-color press. They're very carefully aligned so the two images are accurately imposed one on top of the other, and they come rolling out at about fifty-three sheets a minute; that seems to be the optimum time for the ink.

You have to remember, the ink passes from the inked plate to the blanket. One of the plates is inked with a warmer color than another; that's worked out so that we get the proper "color" of ink as we call it. There's a very small percentage, 3 to 5 percent, brown added to the black in one plate. One plate is the extended range, which takes the full range, and the other is the short range, which just takes the extremes. That means that the effective exposure range of the process is increased, because it's very hard for them to work with a full-scale photograph which may have a reflection range of one to a hundred, and they're limited to about one to thirty-five.

So I have to make prints softer than I would ordinarily, even for that process. Otherwise, either the whites or the blacks would be lost.

Adams: They have to run up to five hundred copies for "running in" the ink. They do that, of course, on sheets that have been used many times; you don't waste all that paper every time, although there is a very high wastage on a book of this character.

And then it's my job to say, "Well, the ink on this side needs a little support, a little more, I think." Or, "It's a little bit too heavy here." Of course, if we would have what is called "four up," you'd have four plates on a sheet. So when you'd adjust the ink on one, you're also affecting the one above it, the one that comes in afterwards, you might say. So there's always a certain compromise to make. We printed "eight up" on a sheet.

A collated book, such as the My Camera in Yosemite, My Camera in the National Parks, etc., are all printed one or two up, and they're adjusted so the inking for one plate is the same as the inking for another. The sheets can then be cut and perforated and collated separately, but you're not subject to this problem of four up or eight up.

After the impressions are approved, then if the pressman is an honest man--and this man was remarkable--he'll stop the press immediately if a defect appears. Once in a while defects do appear; they can't watch every sheet. When they find a defect, they immediately stop the press, clean off the plate, try to find the numbers of sheets that are bad, and discard those. Some do get through; we do have a few troubles. But after they have stopped the press and cleaned the plates, they still have to run through quite a number of blank sheets to reestablish the ink flow again.

So sometimes I would take the seven o'clock plane from Monterey and be met by George at about seven-thirty, drive in to San Francisco and go to work. Sometimes we'd get it done to the point where I could take the two-thirty plane home, sometimes I'd have to wait until six-thirty, sometimes I'd have to stay overnight and continue the next morning. But very often we'd go right through and suddenly find there was a defect or something had happened. And then a whole new plate would have to be remade, and that would mean a whole afternoon, and we'd get it back that night. Occasionally they ran a night shift when we had a very simple plate, especially the text pages. The printer would set them up and the night shift would come on and follow through. The whole level of the printers' union is very high--they're very exacting.

Teiser: Was the format of the book decided upon before the contents?

Adams: Well, it all comes together. We decided we were going to do a big book. I said, "Let's do a horizontal book because then we won't have any double trucks," as they call the divided plates, which are

Adams: terrible. Most of my important images are horizontal anyway, so this gives it a wonderful chance for scale. And the vertical prints don't suffer at all by it.

However, a horizontal book of that size bound on the short end gives some terrific binding problems. We had an awful time finding a binder who'd come within reason. Finally, the Hiller Binding Company in Salt Lake City did it. They have a tremendous plant and they handle things very well, but they did some sloppy work for us.

Teiser: The book has now gone through several printings, has it?

Adams: No. The first edition was eighteen thousand, I think; that was the first planned edition. Before they had really finished half of that, they realized they needed another ten thousand. Well, we finished the first one, then we were able to make a few corrections, and the next should have been called the second printing, but it wasn't, it was still called the first printing. So twenty-eight thousand copies constitutes the first printing. Technically, it should be one and two, but there's not enough difference between them. The third printing will have thirty corrections, and that will take place some time this spring; the paper's already ordered. We hope that will be another ten thousand copies, but it may not come to pass.

Teiser: What sort of corrections were needed?

Adams: Oh, dates on pictures, for one thing. A few typos. You get them no matter how carefully you handle it. I wanted to shift the position of a couple of plates--I think ending with Mount McKinley would have been better than our present ending. But you can't worry about that now--

Teiser: The special edition, I suppose is all gone.

Adams: The special edition is practically all gone; there was one thousand copies made. We had trouble with that, with difficult binding casings. We had a terrible time finding good cases to hold both the print and the book sturdily. And the book is bound and the end's leather, and I think it should have been mostly all leather.

I don't think there's enough apparent difference between the editions to justify it, except that there is an original fine print with the special edition, and a special case.

There were five hundred made, with one to five hundred Arabic and one to five hundred Roman numerals, and one of twenty-six letters, and most of the lettered copies had serious defects that we had to reject. So far I haven't found any bad deluxe editions.

Teiser: The New York Graphic Society is a subsidiary of Time, Incorporated, is it?

Adams: Yes.

Teiser: Did you feel well-publicized?

Adams: Oh, my gosh, yes. Nothing since sex books have been given such publicity. [Laughter] I had to go all over the country for signing, etc.

You see, they were under some difficulty too, because they were taking a chance. If the book is priced at \$65 and then they go to \$75--it was very costly, and if they didn't sell they'd be in the hole. The New York Graphic Society had been advised that if they didn't make a good showing for 1974 they were going to be canceled out, dissolved, because they hadn't made any money for seven years. Time-Life felt what's the use of perpetuating money losers, which was quite right. (There's lots of them around.)

Teiser: So you bailed them out?

Adams: So this book apparently saved them.

Ted Organ: How many copies have they sold?

Adams: They've sold nearly the entire twenty-eight thousand and are getting ready to print the next ten thousand, I think, which will bring it to thirty-eight thousand copies. I think they have a few thousand copies left. And then of course there are some returns. There were more returns than expected because of bad binding.

So we say the book was very successful. I haven't seen any negative reviews yet--I suppose there are some. We do have quite a few returns, but some of those returns are made up soon. So I suppose it would be safe to say that twenty-five thousand copies have been sold at this time.

The next book in process is The Southwest, which will come out in conjunction with the exhibit down at the University of Arizona and the Amon Carter Museum. We don't have all the details, but we're getting figures on the book. It won't be nearly as big as Images; it will be a squarish book--maybe 9 1/2 by 12. As it's bound on the narrow side in that size, it can be bound by automatic binding equipment, which will make it better. They made some mistakes in this book with collating. After it's thoroughly sewn, they apply what they call "perfect binding fluid" just to pack it up a little more, and some of that got out on some of the pages and stuck them together. These things always happen, but still--

Adams: The thing they did do which was bad, and they certainly got their wrists slapped for it, was they didn't reinforce the end papers. When you open and close a book a certain number of times, unless those end papers are reinforced, the binding will break. The bound book is held to the case by the end papers, and that's reinforced with a piece of linen on both sides.

White House Visit

Teiser: Your recent visit to the White House [January 27, 1975] that was so widely publicized--

Adams: I made a trip to Washington to see the secretary and the President and go on to the opening of the Edward Weston show at the Museum of Modern Art in New York.

Teiser: How did you happen to go see the President and the secretary--the secretary of the interior, wasn't it?

Adams: Well, [Rogers C.B.] Morton I've known for a long time, and I saw him because I was in Washington. But what happened was, the White House photographer is a very nice young man, and he'd got very excited about the book, bought a copy, and then took it over and showed it to the Fords, and Mrs. Ford immediately borrowed it and kept it. So Turnage suggested we make a presentation copy to the President, which was I think the right thing to do. Then she expressed great interest in having one of the prints, "Clearing Winter Storm, Yosemite." So I just happened to have one, a big-sized one, at hand, and so we packed that off to her.

The idea was that I'd go there and have a semiofficial presentation. So after seeing the secretary of the interior, we got to the White House at twelve o'clock, and we met in the Oval Room and then had to go outside to get pictures taken, and came back and spent maybe twenty-five minutes talking with the President, primarily on national parks.

Teiser: What did you tell him?

Adams: Well, you see, the national parks have not had good presidential support for many years. We were perfectly frank about it. We said that the parks should have strong presidential support and this was his chance with the forthcoming campaign--this could be a very important element of his platform, because people have been very upset about the way the parks haven't been protected.

Adams: So we sat there and had a very pleasant discussion. He's a very impressive person. He's very quiet; he's very gentle; he looks you right in the eye, and you have a feeling of complete integrity.

Then after that was over Mrs. Ford took us for a complete tour of the White House--everything--marvelous.

Teiser: Who's us?

Adams: Bill Turnage and the New York Times photographer and the White House photographer [David Kennerly]. The White House photographer very seldom has his pictures appear in print. He doesn't break in on the news people unless they request it.

So then we had a very amusing thing happen. We went into the third floor, the family quarters. There's little corner rooms. And the corner room on the southeast is her room, a kind of a den where she can read. Well, she has staff offices too, you know--an awful lot of social things go on. But she has this little hideaway. Then she took us to the other side and said, with a big smile, "Our predecessor loved this room. He would come in here and read. He had all his hi-fi equipment in this cabinet. This is where he used to come and play his tapes--I mean his records." [Laughter] And everybody guffawed.

Then we had a very nice informal luncheon in what they call the solarium, which is really her girl's room, but she appropriates it for these occasions. The whole thing was really very engaging.

After that we were driven to the hotel to pick the baggage up and taken to the International Airport.

Park Problems and Solutions

Teiser: What did you tell Secretary Morton--?

[End Tape 31, Side 1]

[Begin Tape 31, Side 2]

Adams: Well, I had known Morton--not too well. He was very cordial. I gave him a copy of the book, and then we talked about the national parks in greater detail, about the very miserable master plan that had been motivated pretty much by the concessioners, and distorted, and that we felt that it needed great strength and support from him directly, as secretary of the interior--

Teiser: That was particularly in relation to Yosemite?

Adams: Well, yes; of course Yosemite is a key park. What they accomplish in Yosemite is really the symbol of what will be done elsewhere; but it has to be done. It's sort of proven to be our function in Yosemite--many innovations, like the buses, are very satisfactory. But a lot of the master plan was very bad and was very much oriented toward further development.

I pointed out at least two things: that the establishment of the national park system by Stephen Mather was predicated on the fact that business would be invited in to invest in public services--hotels and food and so on--and that they would be strictly controlled. They'd be allowed to make a fair profit, but they would remain under the strict control of the government.

As every building was government property, you couldn't use it for collateral for business loans, which meant that they [the concessioners] had to finance everything themselves, which of course resulted in investments whose only source would be increased charges to the public even when amortized over a period of years.

We had that in Yosemite when we applied for renewal of concession--we had to put up over \$100,000 for refurbishing the building, because it was about ready to collapse anyway, and do a lot of things of that nature, and we couldn't borrow anything from the bank for the building; we had to put our own resources up for collateral. It actually paid off, but that's the only way it could be done. But if the government had moved in on their own and purchased the equity on all these buildings, then leased the operations, the government could then, by a very slight increase in fees to visitors, easily amortize the government investment, and the rates to the public would then significantly drop.

Of course we had to pay a 5 percent on gross income as a concession fee, plus putting aside another 5 percent for construction amortization for the next time it came around. Turnage was able to reduce the concession fee to one percent in our case. The Yosemite Park and Curry Company only paid 1 3/8 percent--it's a big company! So we always considered it to be very unfair that the company netting \$20 million a year only paid 1 3/8 percent, whereas a company grossing \$150,000 or \$200,000 would have to pay 5 percent.

Well, we've progressed considerably since then, but for a \$100,000 gross, that 5 percent is \$5000 as against \$1000 for one percent. Five thousand dollars puts a nice bite into the pocket-book.

Teiser: You mentioned last evening that you also were discussing the semantics of parks--

Adams: Yes, that was another thing that I think is terribly important, that I stress in all my lectures--the fact that for years the public and the government, everyone, has labored under the tyranny of words. They've implied meanings. The word "park" in "Yosemite National Park," "Golden Gate Park," or "Central Park," or a town park with a bandstand, implies a place for fun, recreation, etc. There's no implication at all of preservation.

The "Point Lobos State Reserve" is a marvelous name because the "reserve" really defines what it is. It should be "Sequoia National Reserve" and "Yosemite National Reserve;" that would be the dominant controlling descriptive term, and I think everybody would then begin to understand. They don't understand a "wilderness area" because "wilderness" is just as vague a term as "conservation." The middle of the Mojave Desert is wilderness--and a lot of Los Angeles is wilderness [laughing]. There you're speaking of areas--and to attribute a park quality to wilderness areas, you're producing a very vague definitive term. It should be a "reserve" or "preserve," or you can have certain areas, like the Hastings preserve up the Carmel Valley, operated by the University of California--I forget the name but it's part of the University--not extension, but a station. It's not open to the public; it's a natural science preserve where they study animals and ecology. Well, that's fine. That's a small area for specific scientific use. The "wilderness reserve" is just simply things left alone as they are, but the place should always be accessible under very simple terms, like trails only, no roads, to walkers and riders. But under a controlled basis, on the theory that you have an opera house and you have an opera and you sell out all the seats and a little standing room and all you have left is lap room--and you shouldn't be selling figurative lap room in the Sierra. [Laughter]

And they have to have controls, like limiting the number of people at a remote lake. Well, in the first place, I don't know how they're going to limit them without great supervision. But they've got to do it, in some way they've got to have a reservation system. I've been told by computer experts that it would be less difficult to install a reservation system for national parks, state parks, and national forests than it would be to put in an airline reservation system. You could go to the post office and get an application on which you listed where you wanted to go and the dates--first, second, and third choice--and put a dollar in as the fee for that and send it off to the reservation center. You would get back a reply. If there isn't any chance at all, you are so advised; if your dates are acceptable and there's room, all right, that's reserved for your purpose. But now if you

Adams: can't make it, then the next person is put on stand-by. But there should be a penalty involved so that if you couldn't make it, you'd have to advise them.

But you could control the whole national park system that way. Somebody could say, "I want to be in Yosemite from the first to the tenth of June and then go to Olympic from the twelfth to the fifteenth" and have that all down, and that would be like selling seats on a plane. There's no reason why it couldn't work. The American Express card idea that the Park Service tried failed because they couldn't make any money on it; that was a very stupid thing for the then director to do.

Well, I guess that's all--that was the second trip. Then I went to the opening of the great Edward Weston show in New York.

Teiser: How was it received in New York?

Adams: Oh, tremendously. It was a magnificent show.

Teiser: You felt it was hung well?

Adams: I felt it was displayed beautifully. My only criticism is that it was very icy; it wasn't at all like Edward's personality. The smaller show at the Witkin Gallery had much more of the personal feeling you had when Edward showed you his prints--a small room and the prints intimately presented. The big show had great rooms and great white spaces and sharp lighting, but it was very cold.

Museums and certain galleries are getting more and more sterile in that way. They do not think of the environment.

Teiser: Some contrast to the Louvre, though.

Adams: The Louvre was the most awful display I've ever seen in my life; things are all crowded together; the lighting is terrible. The paintings are neither clean nor well-protected. And my image of the Venus de Milo in her room--her face is turned away from the light, and throngs of people under her with flashbulbs going off. [Laughter] Everybody's photographing the Venus from all angles--with flash at the camera, which of course is the worst possible lighting you can have. I was interested that the face was not toward the window, and the marble looked rather yellowish and dusty, and not at all like the photographs I've seen. Then the Courbets and the Botticellis and the endless number of things you've seen in great reproductions in art books all your life are just terribly disappointing in their showing. And they say they show only a fraction of what they've got. You know how big the Louvre is--just like the whole Civic Center in itself.

Death of Nancy Newhall

- Teiser: I was going to ask if you want to say anything about Nancy Newhall.
- Adams: Beaumont Newhall is one of my very oldest friends--did we discuss her tragic death?
- Teiser: No.
- Adams: Well, they had moved of course to Albuquerque where Beaumont was a professor of history of photography at the University of New Mexico. They were to give a workshop in Colorado Springs. But prior to that they took a short vacation in the Tetons, which she loved very much. They loved to go down the river in one of these big yellow inflatable rubber boats, just floating down the Snake. I don't know how many miles the trip is, but they dock eventually and are taken back to the hotel by car.

So they were leaving on a Saturday or Sunday afternoon for Colorado Springs, and they said, "Let's just take one more trip down the river." They did, and they were floating along when a great big spruce tree whose roots had been undermined by high water (they'd had very high water that spring) suddenly decided to let go and fell right on the raft, striking Nancy. It hit Beaumont a little--he had a sprained back--and it knocked the other people into the water. But Nancy was pinned by this big tree and suffered shattered ankles and cracked ribs and broken collar bone and multiple concussions. So they finally got her to the hospital and she was gradually coming to, and they thought they'd be able to take her to Albuquerque and take her home after a short time. But she had moments of incoherence, and it was possible that she never would have been herself again on account of brain damage. She just suddenly died. Apparently the diagnosis was that when you have shattered bones sometimes, the marrow can get in the blood stream and cause a blockage in the brain. They said the bones splintered so bad they couldn't repair the very shattered areas there. It perhaps was a rather merciful thing that she did go that way rather than linger on in a mentally impaired condition.

It was a great shock to Beaumont, but he's come out of it very wonderfully and seems to be thriving with all kinds of new objectives and work to do--

- Teiser: She had done a great deal, and a great deal of what she had done is preserved in your books, isn't it?
- Adams: Yes, she and I worked together at great length, and we had great sympathy in many ways and approaches to the world. Towards the end I would say she was getting a little eccentric on solar power, on a

Adams: very emotional basis--and I was a little more careful, having had so much experience with the fanatics, and I would say, "Be sure you get scientific advice on what you write and say, because it still is a very open and difficult question." Solar power has got great potential, but it works in certain areas and doesn't work in others, but not being a scientist--I felt we have to be very careful. We should get more scientific support. Of course, many of the scientists disagree, which is an interesting fact.

Tom Jukes, for instance, thinks that in stopping the use of DDT, the Sierra Club is favoring genocide. There are certain areas of the world where DDT has eliminated the mosquito and millions of lives have been saved, so that is a possibility we have to take.

The Sierra Club counters by saying it's bad for man and beast and it's extinguishing species, and so on. But I think we should be feeling that man is the most important thing; I still must favor a human being over a pelican.

It's like nuclear power--everybody's scared to death about the wastes. Well, we must have enough technology to minimize the dangers from the waste. But when you say we haven't got it, that to me is very disturbing because we've surrendered, I think, to many things of great importance just because of a fear and a distrust of a fundamental technological capability, which I think we have.

More on the Friends of Photography

Teiser: You were mentioning last night another subject--Fred Parker and the Friends of Photography. I didn't realize he had left.

Adams: Yes, we had an arrangement with him, a terminal arrangement, which was I think very favorable. We weren't in a position to give him a long-term contract, and he developed as sort of a sibling of Dave Brower and became rather difficult in his managerial capacity and rather disastrous in his financial awareness and also was making enemies for the Friends by a very arbitrary attitude, although he was an excellently trained and capable person in his field. And I would say that he certainly had the ability, but not the personality or method of human relationships, and we had to terminate him.

He did a great deal for the Friends; he had fine exhibits and he started the publication of Untitled, so I think the trouble is just too bad. He was the best available person we could find and

Adams: there were many favorable opinions of him, not one unfavorable one. But after a while, he became highly paranoid about the board and the restrictions we had to put on him, just as Brower was. It was almost an identical situation.

Teiser: This year's Easter Workshop, "Practical Aesthetics," looks as if it's somewhat less elaborate than earlier. Is that part of it?

Adams: Yes, it's still a little complicated. But all of these people on the program are local.

Teiser: Was part of Parker's trouble that the workshops were too elaborate?

Adams: Well, yes, the one called "The Creative Experience" was just too expensive. He was bringing in people from the East, cost of \$800 for one lecture and we just broke even in a superficial way. But now, for instance, with this program we have, I have one morning and one day; Morley Baer will probably have two days; Dave Bohn will probably have two days; Wynn Bullock, one day; Walter Chappell, a presentation; Bernard Freemesser, probably two days; Oliver Gagliani, maybe the full time; Dick Garrod, part of the full time; Henry Gilpin, part of the full time; Jim Hill will be around quite a little; Anita Mozley comes for a lecture; Henry Holmes Smith will be here the full time; and John Upton may be half the time.

So all these names doesn't mean that that's the steady staff over the six days.

Teiser: Is this more your idea of what a workshop should be?

Adams: Yes, it's not as much of a workshop as it is a seminar. I feel that my workshop in Yosemite is more effective in a particular direction, like in teaching the application of the Zone System visualization in relation to the natural scene. Well, that's a subject which requires a lot of time. But we have quite a number of people assisting me too there, because a divergent point of view is less fatiguing and more exciting.

"The Creative Experience," of course, included everything--dance, poetry, music, philosophy, painting--and that was a very valuable experience for artists in any field, when you see what the other arts are capable of. But it can be very expensive.

Teiser: Will the Friends continue? You've retired--

Adams: I'm chairman of the board.

Teiser: You were president?

Adams: Yes. And we have William Rusher, who's a very capable person, in administration, as president. But he doesn't pose as director. The responsibility still is on me as far as the organization goes. And we have Rodney Stewart as curator. But we have to find a director who can raise money, meet people, make big plans--and then at that time I will retire from active participation.

Teiser: But you're continuing to take it in the same direction that it has been going?

Adams: Well, we don't know. We have a committee for the future of the Friends which has met a couple of times, and we have many ideas in action. We know we're going to cancel some things, but whether we'll change the character of others--We don't know. Should we have a gallery? If we have a gallery, should we have it in San Francisco? Should we concentrate on publications? Should we have workshops? And if so, where? All these questions have to be balanced out because, as Bill Turnage pointed out, the Friends have the best workshop series going in the country, and yet we can't make money on it; we hardly break even.

The Friends, of course, have sometimes what looks like they have made money--a thousand or so--but they haven't taken into consideration their basic costs which, as a business, we would have to consider a "burden" and all that. I think that we will continue to have workshops and events, and while we don't want to make money in a big sense of the term, we ought to be able to pay the overhead and at the same time put away a 5 percent reserve fund for future workshops. We're allowed that as a nonprofit foundation, there's no question about that. If we started to make an awful lot of money and paid very high salaries, we would then be under suspicion.

Future and Recent Events

Teiser: This is possibly related to something that we were talking about last evening, your plans and the Arizona plans.

Adams: Well, yes. My basic plan is, my prices rise again to \$800 a print in September, because that is going to be the relative price of the print in Portfolio Seven, and after January 1, 1976, I don't make any more prints to order. So the gallery people are being advised that the \$500 price that's now obtained is still available at my discount--

Teiser: You won't make any more prints to order?

Adams: Won't make any more prints to order except sets.

Teiser: Suppose somebody wants a photograph for publication?

Adams: We haven't decided on that.

Teiser: Your portrait of somebody, say.

Adams: Oh, I think that might be obtainable, but prints are not for sale. The point of that is that the dealers will advance and finance enough prints to hold them for a long time. Then, say, I do some new work and I have an exhibit. Well, that exhibit would presumably be made if it would be purchased by an organization. Suppose that MIT wanted an exhibit, or Harvard, or Albuquerque. Well, they could have an exhibit and they would have to pay me maybe 50 percent of \$800, maybe \$400 a print, and there might be some concession, but not much on that. So in that way organizations could get exhibits. Individuals could, I suppose, buy for an organization. But to protect the dealers who have put out so much for you--

If I didn't do it this way, I would be stuck in the darkroom continuously filling orders. And raising the price hasn't done too much damage to the level of orders; in fact, orders are still coming in.

Other people have equally raised prices to match mine. It's amazing what some of the earlier things sell for, absolutely astonishing. Four thousand dollars for Portfolio One--things like that.

Teiser: I think you were mentioning a tentative plan you had for placing your negatives--

Adams: Well, we have it planned that the University of Arizona--they have the money and the attitude--it was very encouraging--marvelous idea to be really the center of photography. They want the archives of people--everything. So my plan is that all my papers and manuscripts relating to all my photography--not necessarily my personal collection of other photographers' work, although I think I will present that to them--all the prints that I have, books, archives in any way, would go to them as a basic collection. It is called the Center for Creative Photography. The Sierra Club material will go to The Bancroft Library. But the point is that if my negatives and everything went to The Bancroft they would just go into a big safe because there's no way to handle it. Here they're going to have a photographic center and academic program, and the negatives will be available to use. It is a very important concept.

Teiser: I think Imogen Cunningham perhaps told you her plan for her trust--that's a different sort of plan.

Adams: Well, I think she's having difficulty with it because I don't think it's a real trust. I think what she's really talking about is a partnership that might become a trust after her death.

Edward Weston's work: his sons being photographers, they were very able to keep printing it well.

Wynn Bullock's work is going to the University of Arizona. There's several other photographers that are being approached, and we're trying to encourage them, because there's going to be a handsome space available, and they intend some day to build a special center, a building, just for the Center.

Teiser: Did I get the implication that no exhibit prints would ever come from it, only reproduction prints?

Adams: Yes, there would be no exhibit prints. There would be prints for reproduction, for educational purposes. And then there is another possibility that certain negatives will be so designated as to carry out my idea, often expressed, that the negative is equivalent to the composer's score, and the print is the performance. So advanced students approved by the committee may be able to take my negatives and interpret them--but not for sale; it will be as a matter of education.

Teiser: Oh, that's an interesting idea.

[End Tape 31, Side 2]

[Begin Tape 32, Side 1]

Teiser: Well, one thing more that I guess you might, if you wish to, put on the tape--something about your photographic session with Imogen Cunningham and her commission for People magazine.*

Adams: It was quite marvelous. They commissioned Imogen to make pictures of me. The western representative, the writer, was bringing her down. And she did quite a series of pictures and some of them were very good. I did quite a series of pictures of her. We had quite a happy day of it; it was very satisfactory. She's really marvelous

*The result appeared in the issue of March 17, 1975.

Adams: at ninety-two, and she really controls herself very well; she took a two-hour snooze after lunch and really worked very hard. And I posed and posed and posed, and she got some good things.

But we were going to develop these negatives here; she wasn't going to send those rolls on to New York. She was going to develop and pick the pictures she liked. So we developed the rolls, dried them as fast as we could, Alan Ross made strip proofs, and we dried them in the microwave oven. [Laughter] Takes about sixty seconds to dry an 8-10 print, and it dries beautifully. Anyway, that was fun.

Then the last thing that happened was a New York radio station--television show--the Reasoner show, came out here, a whole crew, and did a news story about me--news on personalities. So they came and they photographed me working and they talked to the students from Eugene, Oregon, who happened to be here. Then they came and photographed my birthday party. Then we went to Point Lobos and did more pictures in the darkroom. It was quite a take-out. I had a fine time. They spent an awful lot of time with it. They say it will take only between three and four hours of your time; they'll set up and they'll just move in. Well, it takes three or four days--you can't really concentrate on anything else because the house is just full of lights--gosh, it's terrible.

Teiser: You also were on the "Today Show" you said earlier.

Adams: Well, that trip was on the book Images, in Washington, at the opening of my show at the Corcoran Gallery. Then I flew up to New York that night to be on the "Today Show" the following morning, and then I had to fly right back. That worked out very well, but because of the Rockefeller hearings the "Today Show" was canceled in the West. So it was only seen in the East and Midwest.

I'm always happy to get good comments on things, but negative comments do me more good. You know, in the end you learn more from negative comments. I wish that people would be more critical of what they see, but people write cards and say, "I saw you on the 'Today Show' and it was great," and so on. But what really happened--the nitty-gritty--is important, and that's what I didn't feel.

Only one thing on the "Today Show"--the microphone was under my shirt, and I had my glasses off, and I'd talk and I'd move my glasses against my chest, creating a loud crash. And that happened on another show.

So I went to Dallas for the book [Images], to Houston, to Cleveland, to Minneapolis, to Chicago, to Washington, to New York, to Boston, to Detroit, to San Francisco. Then I was due in Los

Adams: Angeles, Santa Barbara, Portland, and Seattle, but by that time I was absolutely exhausted and had high blood pressure, and the doctor ordered me to terminate the tour.

But the book signing sessions are not so bad; it's just that they keep you going. You sign for a couple of hours and talk to people, and then you have to go to a radio session and be interviewed or televised. Then you take a plane to another location, and that's the way it goes.

Teiser: Well, I'm glad you recovered from it.

Adams: I seem to have recovered from it. [Laughter]

Teiser: That brings us up to this moment, does it?

Adams: I guess it does. I can't think of anything.

Teiser: The recent occasion was your seventy-third birthday.

Adams: It's dismal to think about it--I look in the mirror and think of it as thirty-seven, but things don't look quite right.

Anyway, things are going well, and we're planning on the Southwest book, and Portfolio Seven--I guess Portfolio Seven comes first. And then in a couple of years--hopefully a very handsome book on Yosemite and the Sierra Nevada. Then also the revision of the Polaroid book and my technical books.

[End Tape 32, Side 1]

Transcriber: Patricia Raymond
Final Typist: Lee Steinback

INDEX -- Ansel Adams

This index includes the names of selected people but few places and few subjects. For the principal subjects discussed, see the Table of Contents.
 Note: Books and portfolios are listed in the Book Index,

ASMP. See American Society of Magazine Photographers

Abbott, Berenice, 156

Ackerman, Phyllis, 72

Adams, Anne. See Helms, Anne Adams (Mrs. Kenneth)

Adams, Beth (aunt), 235, 238, 245

Adams, Cassandra Hills (Mrs. William J.), 2

Adams, Charles Hitchcock (father), 1, 4, 5, 10-11, 27, 28, 33, 36, 137
 residence, 5, 27, 165, 228, 254, 255, 263, 585

Adams, Edward H. ("Tink"), 373, 424

Adams, Michael ("Mike") (son), 1, 36, 281-282, 328, 534, 724

Adams, Olive Bray (mother) (Mrs. Charles H.), 3, 11, 36, 165, 228, 231,
 232, 585, 615

Adams, Virginia Best (Mrs. Ansel), 159-197, 227-243 passim, 328-335, 430,
 448, 529-530, 610, 720

Adams, William James (grandfather), 2, 3, 11, 618

Adams, William L., 4

Adams-Danysh Galleries. See Ansel Adams Gallery

Albright, Thomas, 536

Albright, Horace, 330, 333, 379, 391, 627-628

Albright Art Gallery, 108, 390, 393

Alderson, George, 688

Alvarez, Walter, 240, 242, 594, 639

American Academy of Arts and Sciences, 576

American Alpine Club, 601

American Institute of Architects, 576

American Place, An, 379, 392, 393

American Society of Magazine Photographers (ASMP), 344, 490, 565, 626

American Trust Company. See Pageant of History in Northern California, The

Anakeef, Sibyl, 395

[in Book Index]

Anderson, George C., 253

Ansel Adams Gallery, 319, 335-337

Anspacher, Carolyn, 68

Aperture magazine, 112, 120, 449-450, 451-452, 453-455, 477, 522, 534, 537,
 566

Appalachian Mountain Club, 601

Applegate, Alta (Mrs. Frank), 162, 164

Applegate, Frank, 162, 163-164, 167, 173, 180, 191, 192, 328

Archer, Fred, 143, 372, 397

- Arizona Highways magazine, 461, 479, 493
 Armitage, Merle, 357
 Art Center School, 14-15, 105, 143, 219, 352-353, 362, 367, 369, 370, 372-373, 397, 424
 Art in the Embassies program, 17, 460-461
 Aspinall, Wayne N., 654
 Astronomical Society of the Pacific, 11
 Atkeson, Ray, 468
 Austin, Mary, 72, 160, 161, 162, 164, 170-181, 184-188, 189, 196, 559
 Avedon, Richard, 345
- Babin, Victor, 30, 77, 299
 Bacon, Ernst, 24, 30, 68, 72, 76, 77, 80
 Badé, William F., 637
 Baer, Morley, 742
 Bailey, Vernon, 646
 Bakers Beach, 9, 36, 584, 701
 Bancroft Library, The, 311, 312, 399, 446, 549, 557, 744
 Bank of California, 11, 182
 Barnack, Oscar, 214
 Barr, Alfred, 401, 402
 Baruch, Ruth-Marion, 509
 "Basic Photo" books, 42, 43, 129, 448-449, 488, 495, 513, 527-528. See
 Book Index for specific titles
 Bauer, Harold, 299
 Bauer, Karl, 337
 Bayer, Herbert, 17, 63, 343, 496
 Beaton, Cecil, 327
 Bell, F.H., 48, 324
 Bender, Albert, 67-70, 72-75, 78, 102, 103, 104-105, 145, 159-162, 169, 175-177, 181, 187-188, 200, 204, 317-318, 319, 328, 384, 390, 515, 560
 Bentley, Ellen (Mrs. Wilder), 275
 Bentley, Wilder, 267, 268, 275
 Berko, Ferenc, 469
 Bernays, Phil S., 613, 680
 Bernhard, Ruth, 148, 359
 Berry, Phillip ("Phil"), 686, 688
 Best, Harry C. (father of Virginia Best Adams), 227, 228, 229, 253, 278, 384
 Best Studio, 228-229, 252, 253, 500
 Bischoff, Werner, 466, 468
 Bishop National Bank. See Islands of Hawaii, The [in Book Index]
 Bissantz, Edgar, 397
 Blanch, Arnold, 79
 Bodega Marine Laboratory, 71
 Bohn, David ("Dave"), 427, 668, 681, 742
 Book Club of California, 127, 176, 187, 515
 book publishing, 427-431, 474-476, 667-669, 715
 Born, Stephen A., 5-6

- Boston Museum, 60, 406, 419, 538
 Bothwell, Dorr, 293
 Bottome, Phyllis, 67
 Boudin Bakery, 578
 Bourke-White, Margaret, 117, 397, 469, 564
 Boyd, E., 164, 174
 Boyd, Louise, 38, 39, 284
 Boyd, Philip, 550
 Boynton, Ray, 78
 Boy Scout Camp, Cimarron, 190-191
 Boysen, Julius, 252
 Bradley, Harold C., 680
 Brady, Matthew B., 46, 48, 294, 298, 390, 413, 415. See also "Brady and the American Frontier" exhibit
 "Brady and the American Frontier" exhibit, 306, 324-326
 Bransten family, 103
 Brassai, 728, 729
 Bray family, 2-3
 Bray, Olive. See Adams, Olive Bray
 Bremer, Anne, 177
 Brett, Dorothy, 175
 Brigman, Ann, 9, 51, 94-95, 148, 304
 Brooks, Paul, 513, 686, 688
 Brower, David ("Dave"), 463, 472, 474, 475, 559, 596, 597, 613, 623-624, 662, 667-668, 670-671, 674-682, 684, 686-689, 690, 692, 693, 694, 698-699, 704, 713, 715-716, 720, 742
 Brown, Edmund G., Sr., 651
 Bruehl, Anton, 58, 149, 399, 563
 Brugiere, Francis, 303-304
 Bry, Michael, 223
 Buckner, Simon B., 351
 Bufano, Beniamino (Bennie), 67, 78, 319, 401, 478
 Buffalo Institute of Art, 108
 Buhlig, Richard, 79
 Bullock, Wynn, 149-150, 295, 301, 315, 418, 477, 742, 745
 Bunnell, Peter, 302
 Burchfield, Charles E., 562
 Burden, Shirley, 452
 Butler, Marie, 6, 27, 370
 Bynner, Witter ("Hal"), 72, 159-160, 162-163, 170, 171, 172, 185, 196
- Caffin, Charles H., 51, 52
 California Palace of the Legion of Honor [museum], 327, 409-410
 California School of Fine Arts, 70, 108, 143, 373, 374-375, 409, 455, 508
 Calkins, Deborah, 436
 Camera Club, Boston, 408
 camera clubs, 9, 50, 110, 303-304
Camera Craft magazine, 268, 304

- cameras, 124, 211, 284, 337-341
 Arca-Swiss [view], 38, 342
 Brownie (No. 1), 37, 231
 Canon, 338
 Corona view, 38
 Deardorff view, 38
 Fairchild, 39, 284
 Folmer view, 38
 Graflex, 39, 340
 Hasselblad, 38, 39, 124-125, 136, 284, 286, 338, 339, 340, 341, 342, 358
 481, 485, 486, 544, 545, 546, 547, 556, 575
 Instamatic, 136
 Kodak [view], 38
 Kodak Bullseye, 37
 Konica, 338
 Leica, 337, 338
 Leicaflex, 135
 Linhof view, 38, 39
 Minolta, 338
 Nikon, 338
 Pentax, 338
 pinhole, 41
 Polaroid, 21, 39-40, 43-44, 117-119, 123, 133, 136, 360, 388-389, 521, 575
 Rolleiflex, 39, 124, 126, 338, 339-340, 341
 Sinar [view], 38
 Speed Graphic, 14, 286
 Speed Kodak (1A), 38
 Vectograph, 392
 Vest Pocket Kodak, 37-38
 Zeiss Contarex, 337, 338
 Zeiss Contax, 38, 337
 Zeiss Juel, 39, 351
 Zeiss Mirroflex, 38, 39, 340
 Zeiss Moviecon, 224
 Zeiss Super Ikonta, 350, 530
Camera Work magazine, 54, 200, 392
 Cameron, Ida B., 26, 27
 Cameron, Julia Margaret, 20, 48, 148, 313
 Caponigro, Paul, 120
 Carlsbad Caverns, 381-382
 Cartier-Bresson, Henri, 14, 15, 20, 46, 89, 215, 300, 304, 339, 368, 453,
 493, 498, 499, 533, 565, 728
 Cassidy, Gerald, 160
 Cassidy, Ina Sizer (Mrs. Gerald), 160
 Center for Creative Photography, 446, 744, 745
 Chapman, Oscar L., 629
 Chappell, Walter, 742
 Chase, Pearl, 683-684
 Church, Thomas D. ("Tommy"), 71
 Circle of Confusion [organization], 111

- Civil Liberties Congress, 254
 "Civil War and the American Frontier, The" exhibit, 413-414
 Clark, Lewis, 612, 669, 673, 679, 682, 719
 Clark, Nathan, 669, 673, 688
 Clark, Walter ("Nobby"), 257
 Clergue, Lucien, 728, 729
 Clinch, Nicholas, 679, 687
 Clyde, Norman, 268
 Coburn, Alvin Langdon, 390, 394
 Coke, Van Deren, 308
 Colby, William E., 36, 241, 244, 588, 589, 594, 598, 599, 608, 610-611,
 612, 621, 623, 632, 633, 635, 642, 643, 647, 673, 680, 705, 716, 719
 Coleman, A.D., 309
 Columbia Foundation, 108, 374
 communism (in the United States), 49, 155-157, 417
 Concerned Photographers group, 510
 Concord (California) City Hall, 420-421
 Connell, Will, 397
 conservation, 37, 64-65, 195-196, 225, 255, 264, 471-472, 582, 721 passim
 Coolbrith, Ina, 67
 Corcoran Gallery, 726
 Cosindas, Marie, 442, 522-524
 Crane, Ralph, 157
 Craven, Julius, 89
 Crocker, H.S. Company, 203-204, 290, 449, 475, 476-477, 479-480, 485
 Crowe, Harold E., 680
 Cunningham, Imogen, 9, 50, 67, 91, 94, 96, 126, 150, 153, 315, 386-387,
 745-746
 Curley, Charles, 373
 Curry, D.A., 231
- daguerreotypes, 59, 140, 361, 390, 482
 Dali, Salvador, 562
 Damon, Bertha Clark Pope, 72, 159-162
 Danysh, Joseph, 336
 darkrooms, 315, 569-578
 Dart, Justin, 684
 Dassonville, William E., 8, 9, 51, 74, 127, 128, 176, 395
 Davidson, Bruce, 111, 147
 Davis, Perry, 445
 Dawson, Glen, 239-240
 De Cock, Liliane, 203, 215, 289, 292, 294, 302, 304, 338, 431, 433, 532
 Dedrick, Claire, 688
 Degnan, John, 251
 Delattre, Pierre, 549
 Delphic Studios, 319
 de Pachmann, Vladimir, 77
 Deschin, Jacob, 309
 Desmond Park Service Company, 252

- de Young Museum, 70, 87, 309, 310, 311, 318-319, 405, 408, 534-537, 721-722
 Diazo [process], 44
 Dickey, Randall, 679-680
 Dixon, Edith Hamlin ("Edie") (Mrs. Maynard), 197
 Dixon, Maynard, 78, 101, 197, 582
 Dmitri, Ivan, 129
 Dodge, Edwin, 173
 Dominican College, San Rafael (California), 425
 Dove, Arthur, 313
 Downie, Harry, 167
 Downtown Gallery, New York, 419-420
 Dreis, Hazel, 74-75, 176, 188
 Drury, Newton, 701, 704
 DuPont [company], 64
 Dyer, Pauline, 679
- Eakins, Thomas, 148
 Eastman, George, 256-258
 Eastman [George] House, 305, 457-458, 459, 468, 539
 Eastman [Kodak Company], 43, 63-64, 70, 82, 83, 136, 138, 141, 197, 212, 213, 215, 217, 257-258, 346, 378, 385, 387-388, 437-438, 457-458, 521, 525, 527, 577
 Easton, Ansel, 10
 Eaton, _____, 373
 Echo Park dam controversy, 652-653
 Edwards, John Paul, 50, 51, 96, 153
 Edwards, Mary Jeannette, 96
 Ehrlich, Paul, 616
 Eichorn, Jules, 679
 831 Gallery, 567
 Eissler, Frederick, 688
 Elkins, Frances, 703
 Elman, Mischa, 79
 "Eloquent Light" exhibit, 406
 environment, protection of, 225. See also conservation
 Eugene, Frank, 394
 Evans, Carl, 173
 Evans, Frederick, 217
 Evans, Herbert, 240, 594
 Evans, John, 173
 Evans, Walker, 156, 298
 Eveleth, William, 188
 Ewing, Grace Sovulewski (Mrs. Frank B.), 252, 265
 exposure meters, 91, 94, 133-136, 143-145, 356
- f/64. See Group f/64
 Fall, Albert, 629
 "Family of Man" exhibit, 209, 322-323, 403-404, 540

- Farm Resettlement Administration. See Farm Security Administration
 Farm Security Administration, 48, 298, 340
 Farquhar, Francis P., 199, 305, 324, 390, 625, 626, 631, 637, 665, 669
 680, 714
 Farquhar, Marjory B. (Mrs. Francis P.), 610
 Farquhar, Robert, 318
 Farr, Fred, 224, 576
 Fellig, Arthur. See Weegee
 Ferris, Melton, 451
 Ficke, Arthur Davidson, 72, 160, 174
 Field, Sara Bard, 68, 78, 310
 films. See photographic films and plates
 filters [major discussions of], 93-94, 116, 212, 256, 257, 259
 5 Associates, 495, 500-501, 502
 Flaherty, Robert J., 95, 334
 Focus Gallery, 567
 Foley, David J., 252
 Folmer & Schwing, 38
 Foothill College, 70
 Ford, Betty (Mrs. Gerald), 735-736
 Ford, Gerald, 735-736
 Ford, Henry, Museum, 306, 324
 Forsyth, Alfred S., 688
 Forsyth, E.C., 110
Fortnightly magazine, 357
Fortune magazine, 70, 126, 343-345, 348, 353-354, 387, 397, 420, 435-436,
 484
 Frankenstein, Alfred, 371
 Frederick, Paul, 506
 Freemesser, Bernard, 742
 Fremont Indemnity Company, 316, 420
 Friends of the Earth, 678, 716
 Friends of Photography, 51, 66, 106, 110, 112, 217, 295, 301-305, 307-308,
 365, 398, 450, 451, 464, 499, 611, 635, 663, 673-674, 741-743.
 Friends of the Sea Otters, 663
 Fritsch, Jules, 276-277
 Frugé, August, 679, 686, 687, 688
 Fujita, 67
 Futtrell, William, 688
- Gagliani, Oliver, 742
 galleries, photography, 111-112, 319. See also under names of individual
 galleries
 Gardner, Alexander, 324, 390
 Garland, Marie, 174
 Garnett, William ("Bill"), 285-286, 373, 464, 468, 469, 470
 Garrod, Richard ("Dick"), 225, 339, 452, 742
 Gasser, Adolph, 42, 571
 General Graphic [Services], 378. See also Welcher, Irwin

- Genthe, Arnold, 46, 114, 215, 298, 326-327, 328, 468
 Gidlow, Elsa, 507
 Gilpin, Henry, 224, 452, 742
 Gilpin, Laura, 198-199
 Ginzton, Edward, 516
 Glaser, Donald, 556
 Gleason, Rodney, 266
 Golden Gate International Exposition, 113-115, 155, 387, 389-392, 394-398, 399, 408
 Golden Gate National Seashore, 701
 Goldsworthy, Patrick, 688
 Gonne, Maude, 168, 169
 Grabhorn, Edwin, 75, 188, 200
 Grabhorn, Robert, 75, 200
 Grabhorn Press, 68, 74, 175-176, 187, 200, 318, 445, 515
 Grand Canyon dam controversy, 597, 624, 691-694
 Grand Teton National Park, 652
 Greany, J. Malcolm, 487
 Greene, James, 420
 green flash, 115-116
 Gregory, Michael, 534
 Grosvenor, Gilbert H., 636
 Grotch, Stanley, 221, 226-227
 Group f/64, 9, 49-51, 87, 89-91, 93, 94-96, 99-102, 105-107, 109, 113, 114, 121, 142, 153, 156, 181, 219, 295, 301, 310, 319, 375, 397, 408
 Guggenheim Foundation [fellowships], 197, 294, 419-420, 426, 431-435, 501, 558
 Guggenheim Museum, 411
- Hagel, Otto, 394
 Hahnemann, Samuel, 26
 Hall, Ansel, 227, 230
 Hamlin, Edith. See Dixon, Edith Hamlin
 Hansen, William W., 516
 Hardy, Rex, 292-293, 355, 395, 397
 Harriott, _____, 32, 33, 254-255, 416
 Hartley, Marsden, 330, 562
 Hartzog, George B., Jr., 628-629, 648
 Harwood, Aurelia, 599, 610
 Harwood Lodge, 610
 Hasselblad, Victor, 341
 Heimbucher, Clifford V., 680
 Heineken, Robert E., 394
 Helms, Anne Adams (Mrs. Kenneth), 500
 Hetch-Hetchy dam controversy, 595, 613-615, 621, 692, 697
 Heyman, Theresa, 386
 Hildebrand, Alexander, 675
 Hildebrand, Joel H., 541-542, 548, 675
 Hill, David Octavius, 390

Hill, Jim, 742
 Hills family, 2
 Hoffman, Mike, 455
 Holder, Preston, 90, 101
Holiday magazine, 343
 Holliday, James S. ("Jim"), 187
 Holman, Francis ("Uncle Frank"), 231-237, 245, 264, 584-587, 710-711
 holography, 153
 Hopper, Edward, 147, 562
 Horan, James D., 414
 Howard, Robert, 78
 Huber, Walter, 266, 612
 Hudson, Tom, 659
 Huestis, Charles, 688
 Huffman, John W., 552
 Humble Oil [Company], 659
 Huneker, James, 19
 Huntington Library, 312
 Hutchings, James M., 230
 Hyde, Philip, 464, 659, 669, 688

IBM, 72, 316, 347
 Ickes, Harold, 623, 629-631
 "I Hear America Singing" exhibit, 466, 496, 498, 540
Infinity magazine, 450-451
 Institute of Design, 308

Jackson, Joseph Henry, 290
 Jackson, William Henry, 18, 48, 298, 306, 324, 327-328, 391, 413, 415
 Japanese-Americans, World War II relocation. See Manzanar
 Jeffers, Robinson, 67, 73, 127, 184, 314, 423-424, 452, 558-561
 Jeffers, Una (Mrs. Robinson), 184, 560
 Jenkins, Louisa, 85
 Joesting, Edward ("Ed"), 487-488
 John Muir Institute, 677-678
 Johnck & Seeger, 318, 515
 Jones, Ken, 479
 Jones, Pirkle, 62-63, 374, 504-506, 508-509, 511
 Jukes, Thomas H. ("Tom"), 471, 472, 542-543, 647, 673, 741
 Julian, Dick, 158-159, 294, 364, 573-574

Kaminski, Edward, 365, 367, 369, 373
 Kanaga, Consuelo, 9, 90, 91, 101
 Karsh, Yousuf, 21-22
 Käsebier, Gertrude, 51, 394
 Kefauver, Nancy (Mrs. Estes), 17, 460-461
 Keiley, Joseph T., 394

- Kennedy, Clarence, 150, 216, 219, 294, 382, 388, 391-392, 468, 521, 580
 Kennedy, Lawton, 203, 318, 515
 Kepes, Gyorgy, 17, 63
 Kerr, Clark, 541, 543-544, 546, 556
 Kertesz, André, 304
 Kidder-Smith, G.E., 398
 King, Alexander, 373
 King, Clarence, 245-246
 Kings Canyon controversy, 630-631, 696-697
 Knight, Phil, 500
 Kodak. See Eastman [Kodak Company]
 Koshland, Cora (Mrs. Marcus), 69, 317-318
 Kramer, Bill, 659
 Kriley, _____, 73
 Kuehn, Heinrich, 394
- Laboratory of Anthropology, Santa Fe, 327, 413
 Laguna Niguel, 70
 Land, Edwin, 33, 34, 36-37, 43, 81, 93, 117-118, 130, 134, 141, 214, 225, 257, 294, 317, 321, 322, 372, 387, 388-389, 391-392, 403, 442, 452, 472, 494, 519, 520, 521, 523, 526, 663, 684, 700
 Land cameras. See cameras, Polaroid
 Lane, William, 317, 319
 Lange, Dorothea, 9, 23, 48, 78, 101, 146, 158, 292, 293, 340, 344, 348-350, 395, 431, 451
 Lartigue, Jacques Henri, 728-729
 Laurel Hill Cemetery, 34-35, 483-484
 Lavenson, Alma, 50, 90, 101-102, 395
 Lawrence, D.H., 174, 180
 Lawrence, Frieda (Mrs. D.H.), 174, 180
 Leavitt, Helen, 156
 LeConte, Helen Gompertz (Mrs. Joseph N.), 250, 273
 LeConte, Helen M., 66, 76, 230, 250, 591, 664
 LeConte, Joseph, 249, 711-712
 LeConte, Joseph N. ("Joe"), 17-18, 66, 95-96, 230, 249-251, 253, 266, 273, 391, 446, 591, 599, 612, 713
 LeConte family, 17, 235, 249-251, 253, 266, 591, 594, 642, 685. See also under names of individual members
 LeConte Memorial Lodge, 227, 228, 234-235, 244, 250, 253, 254, 261, 262, 462, 465, 594, 608, 711-712
 Lehmann, Charles, 54
 Lehmann, Mrs. Charles, 331
 lenses, general, 59-61, 92-94, 257, 273, 286, 337, 3340, 519-520, 573
 Cooke, 92
 Dagor, 243
 Dallmeyer Adon process, 272, 273
 Goerz Artar Tessar, 572
 Graf Variable Anastigmat, 53
 Schneider Xenon, 391
 Super Angulon, 92, 243-244, 340, 522
 Zeiss Protar, 5, 92
 Zeiss Tessar, 286

- Leonard, Doris (Mrs. Richard), 616
 Leonard, Richard ("Dick"), 599, 612, 614, 622, 623, 624, 636, 670-671, 673, 675, 676, 677, 679, 681, 687, 688, 689, 694, 696, 699, 709, 712, 716, 719
 Leopold, A. Starker, 646, 674, 688
 Leopold, Aldo, 645-646, 657
 Lerski, Helmar, 489
 Lester, Henry, 437
 Libby, Willard F., 552
Liberty magazine, 425
 Library of Congress, 415
Life magazine, 157, 291, 344-345, 348-349, 355-356, 374, 394, 397, 515, 566, 568
 Light Gallery, 112
 light meters. See exposure meters
 Limited Image Gallery, 112, 418-419
 Little, Matthew A., 27
 Litton, Martin, 616, 678, 686, 688
 Logan, Mrs. John S., 537
 Lone Pine-Porterville road controversy, 598, 633, 709-710
 Long, Haniel, 160, 175
Look magazine, 356-357, 443
 Lorenz, Pare, 95
 Louie, Ernest, 451
 Luhan, Antonio ("Tony"), 172-173, 178-179
 Luhan, Mabel Dodge, 160-161, 170-181, 183-184, 190
 Lunn, Harry, 317
 Lurie, Louis, 126
- McAgy, Douglas, 409
 McAgy, Geraldine, 409-410
 McAllister, Hall, 246, 252
 McAlpin, David H. ("Dave"), 285, 301, 313, 317, 334, 401-402, 452, 607, 723
 McCloskey, J. Michael ("Mike"), 717
 McDuffie, Duncan, 249, 612
 McGraw, Max, 424, 474
 McGraw, Richard ("Dick"), 67, 224, 341, 423-425, 439-440, 442, 452, 469, 474, 495, 702
 McGraw Colorgraph Company, 424
 McGraw Foundation, 474, 667
 McHenry, Dean E., 543, 557
 McMillan, Edwin M., 519
 Magnum, 565
 Maloney, Tom, 24-25, 402, 415, 426, 457, 564
 Manhattan Camera Club, 51, 54
 Mann, Marjorie, 307-308, 309, 371, 499, 500, 509
 Mann, Walter J., 201
 Mann, Walter J. Company, 199, 205, 290, 449

- Manzanar, 23-26, 57, 105, 151, 415-416, 509. See also Born Free and Equal
[in Book Index]
- Marin, John, 20, 147, 190, 313, 330, 393, 410, 562, 563
- Mars, photographs from, 16-17, 141
- Marshall, George, 156-157, 457, 601, 666, 677, 679, 688
- Marshall, Louis, 601, 666
- Marshall, Robert, 156, 601, 666
- Martin, Ira, 58
- Masson, Paul, winery, 490, 503-508, 537
- Mather, Stephen T., 265, 622, 624-625, 627, 628, 737
- Mauk, Charlotte, 448, 495, 679, 688
- Maybeck, Bernard, 31, 70, 411
- Mazzeo, Katy (Mrs. Rosario), 225
- Mazzeo, Rosario, 225, 229, 297, 301, 525
- Mead, Margaret, 360
- Meeks, Everett V., 109, 110, 119-320, 329, 407
- Mees, C.E.K., 256-258
- Meith, Hansel, 394
- Meriden Gravure, 200
- Merritt, Ralph, 23, 24, 25, 241
- Meserve, Frederick, 390, 414
- Metropolitan Museum, 108, 109, 190, 317, 409, 458, 504, 537, 721, 722-724
- Meyer, Eugene, 330-331
- Meyer, Otto, 503-504
- Meyer, Roland, 479-480
- Meyer, Walter, 331
- Mieklejohn, Alexander, 542
- Mili, Gjon, 334, 394
- Mills College, 70, 73, 145, 317-318
- Minaret summit road controversy, 598, 633, 710
- Mineral King controversy, 596, 624, 631-632, 664
- Minick, Roger, 477
- Model, Lisette, 58, 409-410
- Modotti, Tina, 100, 148
- Moe, Henry A., 433-434
- Moholy-Nagy, László, 17, 62-63, 113, 114, 394, 398, 409
- Monterey Peninsula College, 312
- Mooney, Rena, 30-31
- Mooney, Thomas ("Tom"), 30-31
- Moore, Benjamin S. ("Ben"), 7, 12, 219
- Moore, Jean Chambers, 69, 97
- Moran, Thomas, 67
- Morgan, Barbara, 154, 155, 292, 293, 334, 365, 367, 393, 395, 437, 451, 564
- Morgan, Douglas, 289, 437
- Morgan, Lloyd, 437
- Morgan, Willard D., 334, 430, 437, 564
- Morgan, Willard D., family, 58
- Morgan & Lester, 436, 437, 438. See also Morgan & Morgan
- Morgan & Morgan, 129, 187, 202, 269, 437. See also Morgan & Lester

- Morley, Grace McCann, 408, 458
 Morris, Wright, 456
 Morse, Meröe, 43, 388, 521
 Mortensen, William, 50, 121-122, 149
 Morton, Rogers C.B., 683, 735, 736-737
 Moss, Laurence I. ("Larry"), 674, 678, 688
 Moulin, Gabriel, 8-9, 99, 378
 Mount Adams, 637, 638
 mounting, print, 323-324
 Mozley, Anita, 742
 Mrak, Emil, 557
 Muench, David, 400, 493, 529
 Muench, Joseph, 400
 Muir, John, 253, 256, 262, 267, 287, 559, 582, 587, 588, 590, 593, 594, 604
 608, 617, 677, 685. See also Yosemite and the High Sierra [in Book Index]
 Munchheimer, Kurt H., 688
 Munger, Maynard, Jr., 687, 688
 Museum of Art, Detroit, 333
 Museum of Modern Art, New York, 26, 57, 95, 109, 295, 303, 317, 323, 324-
 328, 373, 390, 401-404, 406, 408, 409, 413, 415, 417-418, 419, 457, 458,
 461, 462, 492, 522, 540, 563, 735
 Museum of Science, Boston, 375, 465
 museums and photography, 106-110, 114, 121, 302, 304, 305-306, 310, 406,
 538. See also Friends of Photography and names of individual museums
 Muybridge, Eadward, 390
- Nash, John Henry, 74, 187-188, 318, 515
 National Archives, 48, 324-325, 413
 National Gas Association, 354-355
 National Geographic magazine, 342-343, 636
 National Park Service, 582-721 passim
 "National Parks, Paintings and Photographs" exhibit, 419-420
 National Parks Association, 662, 666, 667
 "Nation of Nations, A" exhibit, 496-498, 540
 Nature Conservancy, 653
 Nelson, Ax, 590
 Newark Museum, 395
 Newhall, Beaumont and Nancy ("the Newhalls"), 193, 324, 334, 404, 459, 511,
 521. See also Newhall, Beaumont; Newhall, Nancy
 Newhall, Beaumont, 5, 34, 48, 109, 143, 154-155, 193, 198, 221, 306, 308,
 309, 320, 324, 371, 390, 393, 396, 401-402, 404, 406, 413, 456-458, 459,
 460, 461, 499, 511, 536, 543, 562-563, 664, 668, 685, 740
 Newhall, Nancy (Mrs. Beaumont), 57, 72, 76, 102, 107, 155, 159, 162, 176,
 190, 196, 198, 204, 229, 270, 309, 371, 384, 399, 401, 402, 404-405, 451,
 456-457, 459, 461-471, 476, 479-480, 487-488, 493, 495, 499, 511, 513,
 535, 536, 537, 539, 543, 558, 562-563, 664, 668, 685, 691, 711, 712, 718,
 721, 740-741
 Nikon [Inc.], 568
 Noble, Charles, 249
 Norman, Dorothy, 336, 392-393, 563
 Norman, Edward, 392-393
 Noskowiak, Sonia, 50, 91, 99, 100, 395

Oakes, John B., 688
 Oakland Museum, 386, 412
 Occidental College, 541, 543
 Office of War Information, 348, 349-351
 O'Keefe, Georgia, 54, 82, 147, 148, 166, 171-172, 183, 197, 313, 330, 392, 393, 401, 410, 562, 563, 567
 O'Melveny & Myers, 316, 420
 Orage, Alfred Richard, 28, 185, 197-198
 Organ, Ted, 17, 26, 164, 165, 215, 316
 Orozco, José C., 79
 Osborne, Lewis, 98
 O'Shea, Johnny, 73
 Ostroff, Eugene, 460
 O'Sullivan, Timothy H., 18, 48, 144, 298, 390, 413, 415
 Outerbridge, Paul, 58, 397, 399
 Owings, Margaret (Mrs. Nathaniel), 224-225, 663
 Owings, Nathaniel ("Nat"), 224-225, 672
 Oye, Harry, 25

P.S.A. See Photographic Society of America
 Pacific Gas & Electric Company, Moss Landing power plant, 660-661
 Padway, _____, 241-242
 Palace of Fine Arts, 28, 31-32
 Panama Pacific International Exposition, 28-32
 Parasol Press, 269, 445
 Parker, Fred, 301-303, 308, 367-368, 394, 499, 741-742
 Parsons, Edward T., 609-610
 Parsons, Marion Randall (Mrs. Edward T.), 474, 599, 608, 609
 Parsons, William, Third Earl of Rosse, 2
 Parsons Memorial Lodge, 610
 Partridge, Marion, 395
 Partridge, Roi, 395
 Partridge, Ron, 126, 395, 421
 Patigian, Haig, 29
People magazine, 745
 Pepper, Stephen, 582
 Pereira, William, 548
 Peterson, Raymond, 199, 202, 290, 449
 Pfeiffer-Big Sur State Park, 635
 Pflueger, Timothy L. ("Tim"), 337, 387, 389, 408
 photogram, 62-63, 88, 113
 photographic films and plates, 82, 94, 144, 211-217, 258-260, 338-339, 377-378, 381-382, 437-438, 443-444, 527, 577
 photographic printing papers, 46-47, 51, 74, 82-84, 127-128, 138-139, 140, 176, 319, 325-326, 362, 363, 377, 414, 527-528
 Photographic Society of America, 90, 110, 122, 303, 387, 413, 568
 Photogravure and Color Corporation, 200
Photo-Lab Index, 437
 Photo League, 49, 57, 58, 110, 114, 154-157

- Photo-Secession, 108, 109
 Piazzoni, Gottardo, 68, 78, 91
 pictorialism, 52, 58, 121. See also Group f/64; camera clubs; Mortensen, William
 Pillsbury, A.C., 231, 252, 256
 Pinchot, Gifford, 593, 594, 613, 619, 627
 Pischel, Kaspar, 625-626
 Point Lobos [State Reserve] purchase, 597
 Point Reyes National Seashore, 698, 699
 polarizing filters, 93-94
 Polaroid Corporation, 21, 33, 81, 118, 257, 263, 344, 348, 378, 387, 388-389, 450, 478, 521-522, 525-526, 566, 663, 700, 725. See also cameras, Polaroid
 Polaroid processes and materials, 21-22, 34, 39, 43-44, 83-84, 113, 117-120, 130, 136, 138-139, 140-141, 155, 194, 210, 212, 213, 436, 442, 443-444, 494, 495, 504, 511, 521-522, 725. See also cameras, Polaroid; Polaroid Corporation
 Pond, Charles F., 231, 584-585
 Pond, Elizabeth Keith ("Bessie"), 231, 234, 584-585
 Pope, Arthur, 72
 Pope, Bertha. See Damon, Bertha Clark Pope
 Pope, Emily, 684
 Porter, Eliot, 104, 304, 314, 315, 335, 393, 399, 440, 441, 442, 452, 464, 474, 581, 657, 667, 680, 688
 power plants controversies, 615-617, 660-661
 Preparedness Day Parade bombing, 30-31
 Price, Robert M. ("Bob"), 599, 612, 717
 Princeton University Art Museum photography center, 301-302, 317
 Puccinelli, Raymond, 78
 Putzker, Ralph, 365, 367
- Quandt, William, 374
- radiation, effect upon photographic materials, 63-64
 Rathbone, Perry, 406
 Ray, Gordon, 434
 Ray, Man, 394, 409
 Reagan, Ronald, 407, 408
 reciprocity law failure, 438, 504
 Redwood National Park, 619, 649, 650-652
 Reed, Alma, 319, 330, 406, 408
 Reinhardt, Aurelia Henry, 610
 Renger-Patzsch, Albert, 320, 398
 Resources for the Future, 653
 Reuther, Walter, 700
 Riis, Jacob, 468
 Rivera, Diego, 73, 79, 316, 333, 532

- Robertson, James, 468
 Robinson, Bestor, 596, 599, 622-624, 679
 Rochester Institute of Technology, 501
 Rockefeller, John D., Jr., 330
 Rockefeller family, 330, 333, 452, 628, 650, 652
 Rockwell, Norman, 147, 561
 Rodakiewicz, Henwar, 174, 334
 Rollins, Lloyd, 107, 113, 310
 Rolph, Mrs. James, 22-23
 Rosenberg, Paul, 350
 Rosenblum, Walter, 156
 Rosenshine, Annette, 489
 Ross, Alan, 746
 Rosse, Earl of. See Parsons, William
 Rothko, Mark, 221
 Roxburghe Club, 204, 318, 515
 Royal Photographic Society, 370, 726
 Rudge, William Edwin, 567
 Rusher, William, 743
- Saarinen, [Erro], 410, 411
 St. Denis, Ruth, 73
 Salathé, John, 590
 Salgo, Sandor, 68, 489, 490
 San Francisco Art Association, 108, 310, 374
 San Francisco Art Institute, 374. See also California School of Fine Arts
 San Francisco Museum of Art, 108-109, 408-409, 410, 465, 721-724
 satellite photography, 16-17, 221-222, 226-227
 Sattler, _____, 27
 Save-the-Redwoods League, 596-597, 619, 650-652, 692, 704-705, 716
 Schu, _____, 232, 585, 586-587
 Sears, Bill, 468
 sensitometry. See Zone System; exposure meters
 Sert, Jose M., 333
 Shahn, Ben, 394
 Sharpe, Gerry, 85, 215, 293, 470, 495
 Shawn, Ted, 73
 Sheeler, Charles, 294, 317, 334, 394, 397, 564
 Sherwin, Raymond J., 674, 687, 688
 Shewan-Jones winery, 379, 503
 Shinn, Walter Scott, 390
 Shuster, Will, 160, 175
 Siembab, Carl [Gallery, Boston], 406, 419, 538, 567
 Sierra Club, 37, 76, 187, 238, 240-246, 251, 266-267, 276-277, 278, 279,
 303, 311, 427, 429, 431, 446, 447, 448, 462-463, 466-467, 474-475, 476,
 514, 516, 531, 537, 538, 542, 543, 558-559, 576, 582-721 passim, 741, 744
Sierra Club Bulletin 66, 97, 254, 268, 608, 609, 636-637, 669, 670, 711,
 712, 714, 716

- Sierra Club Foundation, 693-696
 Sierra Nevada, 11, 17-18, 25, 36, 65-66, 67, 98, 280
 Sill, Richard C., 688
 Simpson, Elizabeth, 7, 219
 Sinel, Joe, 497, 514
 Siri, William ("Will"), 669-670, 678, 688, 709, 719
 Sive, David, 688
 "Sixty Photographs" exhibit, 326-328, 409
 Smith, David, 313
 Smith, Henry Holmes, 742
 Smith, W. Eugene ("Gene"), 20, 46
 Smithsonian Institution, 305-306, 460, 506
 Society of Photographic Scientists and Engineers, 81-82
 Solomons, Theodore, 249, 266, 272
 Southworth and Hawes, 390
 Sovulewski, Gabriel, 252
 Spanish-Colonial Art Society, 162
 Spencer, Eldridge T. ("Ted"), 85, 108, 115, 374, 606-607
 Spencer, Jeanette Dyer (Mrs. Eldridge T.), 32, 85, 378, 501, 606-607
 Spencer, Kenneth, 91
 Stackpole, Peter, 336-337, 395, 397
 Stackpole, Ralph, 78, 337
 Stanford University, 1, 318, 390, 536
 Starr, Peter, 267-268, 271
 Starr, Walter A., 267-268, 602, 652, 672, 717
 Stebbins, G. Ledyard, 547
 Stegner, Wallace, 407-408, 729
 Steichen, Edward, 23, 56, 115, 148, 322, 351-352, 371, 393, 394, 402-403, 426, 457, 562-564
 Stern, Rosalie (Mrs. Sigmund), 54, 55, 69, 73, 317, 331
 Stern, Sigmund [family], 54, 452
 Sterne, Maurice, 70, 79, 104, 173
 Stevens, Albert, 217
 Stewart, Rodney, 743
 Stieglitz, Alfred, 18-19, 20, 48, 51, 52-56, 67, 95, 104, 114, 123, 142, 147, 148, 183, 197, 199, 200, 268, 269, 304, 308, 310, 312, 313, 314, 317, 319, 328, 329, 330, 334, 335-336, 391, 392, 393, 394, 396, 398, 401, 406, 407, 408, 409, 419, 440, 444, 536, 561, 562-564, 565
 "Story of a Winery, The" exhibit. See Masson, Paul, winery
 Strand, Becky (Mrs. Paul), 183
 Strand, Paul, 48, 56-57, 67, 102, 104, 123, 142, 155, 156, 157, 181, 304, 313, 314, 320, 328, 330, 335, 336, 392, 393, 397, 409, 410, 415, 452, 456, 579, 685, 724
 Strauss, Lawrence ("Larry"), 77
 Stravinsky, [Igor], 195
 Strong, Ray, 644
 Stryker, Roy, 48, 298, 413
 Stubbins, Hugh, 70
 Sturtevant, Roger, 387

Sullivan, Noel, 171
 Sunderland, Clyde, 284-285
 Sutro Heights, 35, 483
 Swift, Florence, 100
 Swift, Henry F., 50, 51, 100, 153

Taggart, Nell, 611, 663
 Talbot, William Henry Fox, 306, 320, 460
 Tappaan, Clair S. ("Judge Tappaan"), 242, 243, 594, 599, 612, 638, 664, 717
 Tappaan, Francis, 594, 638, 643
 Taylor, Jim, 12, 26, 229
 Taylor, Paul, 344, 348, 408
 teaching, 84, 142, 219, 246-247, 336, 417-418. See also Art Center School;
 California School of Fine Arts; workshops, photography
 Tenaya Lake road controversy, 634-635
 Tepfer, Sanford, 688
 "This is the American Earth" exhibit, 461, 462-471, 474, 496, 539-540, 711-712
 Timber Cove, 70
 Tioga road controversy, 598, 633-634, 710
 Tjerandson, Carl, 511
 Townsley, Forrest, 626
 Train, Russell, 705
 Tressider, Donald B., 671
 Turnage, William ("Bill"), 301, 406, 407, 569, 645, 676-677, 727, 731, 735-736, 743

U.S. Camera magazine, 146, 292, 426, 492, 507
 U.S. Potash Company, 330, 379-381, 628
 Udall, Stuart, 576, 683
 Uelsmann, Jerry, 146, 295
 Ulmann, Doris, 331-332
 Union Carbide [Corporation], 353-354
 Union Pacific [railroad], 48
 United States Forest Service, 582-721 passim
 University of California, 541, 543-558. See also Fiat Lux [in Book Index]
 Berkeley, 72, 319, 405, 487, 545-546
 Santa Cruz, 67, 70-71, 311, 511, 543, 548
 University of Rochester, 71, 347
 Unruh, Jess, 407, 408
Untitled magazine, 112, 450, 741
 Upton, John, 742
 Urey, Harold C., 548

Valeceritos, Margaret, 63, 577
 Van Dyke, Willard, 9, 50-51, 91, 95-96, 106, 107, 153, 156, 397

- Van Tyne, Anne, 688
 Varian, Russell, 1, 515-516, 518-519
 Varian, Sigurd, 2, 515-516, 519
 Varian Associates, 1, 218, 486, 516-517
 Viavant, June, 688
 videotape, 222-224
 Vroman, Adam Clark, 47, 48, 298
- Walker, Todd, 308, 394
 Wallace, Henry, 630
 Warhol, Andy, 562
 War Relocation Authority, 23
 Warren, Dody, 202, 451-452
 Washburn, Bradford, 305, 395
 Waters, George, 205, 290-291, 477, 580, 729-730, 731
 Watkins, Carleton E., 256
 Wayburn, Edgar, 599, 619, 633, 676, 687-688, 694, 695-696, 701, 710, 713, 720
 Wayburn, Peggy (Mrs. Edgar), 683
 Webb, William G. ("Bill"), 47, 298
 Weber, Al, 286, 292, 295
 Weege, 61
 Weiss, Margaret, 500, 522, 524
 Welch, Marie, 72
 Welcher, Irwin, 323
 Wells Fargo Bank, 11, 182
 West, Levon. See Dmitri, Ivan
 Weston, Brett, 23, 67, 90, 91, 102, 103, 114, 153, 224, 293, 297, 310, 339, 340, 351, 365, 384, 394, 435, 451-452, 464, 469, 499, 563
 Weston, Charis Wilson (Mrs. Edward), 148, 150, 351, 383, 426, 645
 Weston, Cole, 67, 301
 Weston, Edward, 9, 18, 19, 50, 51, 53, 54, 56, 58, 67, 68, 85-86, 88, 91, 93, 95, 96, 99, 100, 102-103, 105, 106-107, 114, 115, 142-143, 147, 148, 150-151, 153, 181, 202, 216, 217, 219, 290, 292-293, 294, 297, 304, 310, 311, 312, 313-314, 315, 317, 319, 320, 353, 357, 374, 383, 384, 385, 392, 394, 395, 398-399, 400, 401, 403, 407, 409, 423, 426, 429, 430, 431, 438, 448, 451, 466, 470, 499, 533, 559, 560-561, 563, 568, 577, 645, 735, 739, 745
 Weston, Neil, 421
 White, Clarence, 58, 394, 396
 White, Minor, 21, 131-132, 137, 221, 294, 335, 366, 371, 374-375, 450, 451, 453, 454-456, 459, 468, 499, 501
 Whiteside, Doug, 386
 Whitney Museum, 410
 Wilderness Conference, 683
 Wilderness Society, 156, 601, 653, 662, 666, 678, 687
 Wildflower Festival, 1935, 683, 712
 Wilson, Adrian, 204, 205, 511-512, 514, 558, 729, 730, 731
 Wilson, Woodrow, 627
 Witkin, Lee, 112, 317, 567

Witkin Gallery, 112, 739
 Wittick, Ben, 46, 47-48, 298, 327, 413
 Wolverine World Wide, Inc., 290-291, 345, 451, 566
 Wood, Charles Erskine Scott, 68, 78, 169, 310
 Wood, Charles R., 200, 204, 558
 workshops, photography, 291-295, 359, 363-368, 425-426, 511-513, 522, 742
 Worth, Don, 294
 Wrattan and Wainright, 256, 257, 258
 Wright, Cedric, 65, 69, 75-76, 163, 200, 267, 299, 468, 469, 474, 642,
 643-645, 685
 Wright, Frank Lloyd, 411-412
 Wyeth, Andrew, 147, 561
 Wykoff, Robert, 266

Xerox [process], 44, 140, 214

Yale University, 109-110, 319-320, 329, 406-407, 408, 541
 Yeats, William Butler, 168
 Yosemite, 24, 37, 227-232, 244-246, 252-254, 265, 278-279, 311, 312, 370,
 383-385, 422-423, 446, 447, 486, 512, 582, 721 passim, 737
 Yosemite [Park and Curry] Company, 375, 423, 670-671, 700, 737
 Young, Ella, 72, 159, 162, 168-181, 189, 196, 519
 Young, Whitney, 700
 Youngquist, E. Clifford, 679

Zech, Frederick, 6-7, 219-220, 370
 Zeiss Ikon organization, 337-338
 Zone System, 45, 121, 129, 131-133, 137-138, 142-143, 210, 213, 219, 258,
 297, 370, 372, 573
 Zorach, Marguerite (Mrs. William), 78, 332
 Zorach, William, 78, 319, 332

BOOK INDEX -- Ansel Adams

(This index lists books with text and/or photographs by Ansel Adams, portfolios of photographs by Ansel Adams, and books about Ansel Adams.)

- American Earth.* See *This is the American Earth*
Ansel Adams, Images 1923-1974, 202, 338, 371, 405, 459, 537, 724, 729-735, 746-747
Artificial-Light Photography, 130, 448
Born Free and Equal, 24-25, 415-416
Bracebridge Dinner, 500-501
Camera and Lens, 125, 130, 438-439, 475
Creative Change, 71, 461
Death Valley, 493, 497, 530
Eloquent Light, The, 54, 57, 72, 163, 185, 190, 229, 384, 535, 537, 580; projected Volume II, 580
Fiat Lux, 72, 131, 204-205, 207, 283, 502, 510, 543-558
Illustrated Guide to Yosemite Valley, 430-431
Introduction to Hawaii, 502-503
Islands of Hawaii, The, 71, 502-503, 529-531
Land of Little Rain, The, 186, 189-190, 287, 430, 449, 559
Making a Photograph, 129, 267, 401
Mission San Xavier del Bac, 453, 479, 495
My Camera in the National Parks, 290, 430, 448, 558, 732
My Camera in Yosemite Valley, 290, 430, 448, 449, 558, 732
Natural-Light Photography, 130, 448, 449
Negative, The, 42, 130, 438-439
Pageant of History in Northern California, The, (American Trust Company book), 71, 182-183, 479-488, 502, 507
Parmelian Prints, 69, 97-98, 127, 444
Polaroid Land Photography Manual, 130, 131, 439, 449, 478
Portfolio One, 444-445, 536, 561, 744
Portfolio Two, 445
Portfolio Four, 218
Portfolio Five, 107, 218, 269, 305, 315, 533, 536, 721
Portfolio Six, 107, 269, 478
Portfolio Seven, 151, 272, 743, 747
Print, The, 42, 130, 439, 448
Sierra Nevada: The John Muir Trail, 65, 267-275, 493
Singular Image, The, 725
Southwest, The, 734
Taos Pueblo, 74-75, 127, 172, 175-179, 181, 186-189, 199, 570
Tetons and the Yellowstone, The, 459, 495
This is the American Earth, 64, 200, 204, 286, 456-457, 462-471, 473-477, 494, 511, 581, 667, 668, 685, 712, 715
Yosemite and the Sierra Nevada, 287-290, 430, 447-448, 495
Yosemite Valley, 495, 511, 575

Catherine Harroun

Born, St. Joseph, Missouri.

Educated in Pasadena, California; Carlsbad, New Mexico; Stanford University, B.A. in English.

In San Francisco since 1930 as advertising copywriter, Wells Fargo Bank; curator and researcher, Wells Fargo History Room.

Newspaper and magazine writer since 1950.

Co-author of Winemaking in California, a history, 1982.

An interviewer-editor in the Regional Oral History Office since 1965.

Ruth Teiser

Born in Portland, Oregon; came to the Bay Area in 1932 and has lived here ever since.

Stanford University, B.A., M.A. in English; further graduate work in Western history.

Newspaper and magazine writer in San Francisco since 1943, writing on local history and business and social life of the Bay Area.

Book reviewer for the San Francisco Chronicle, 1943-1974.

Co-author of Winemaking in California, a history, 1982.

An interviewer-editor in the Regional Oral History Office since 1965.

19 7074

